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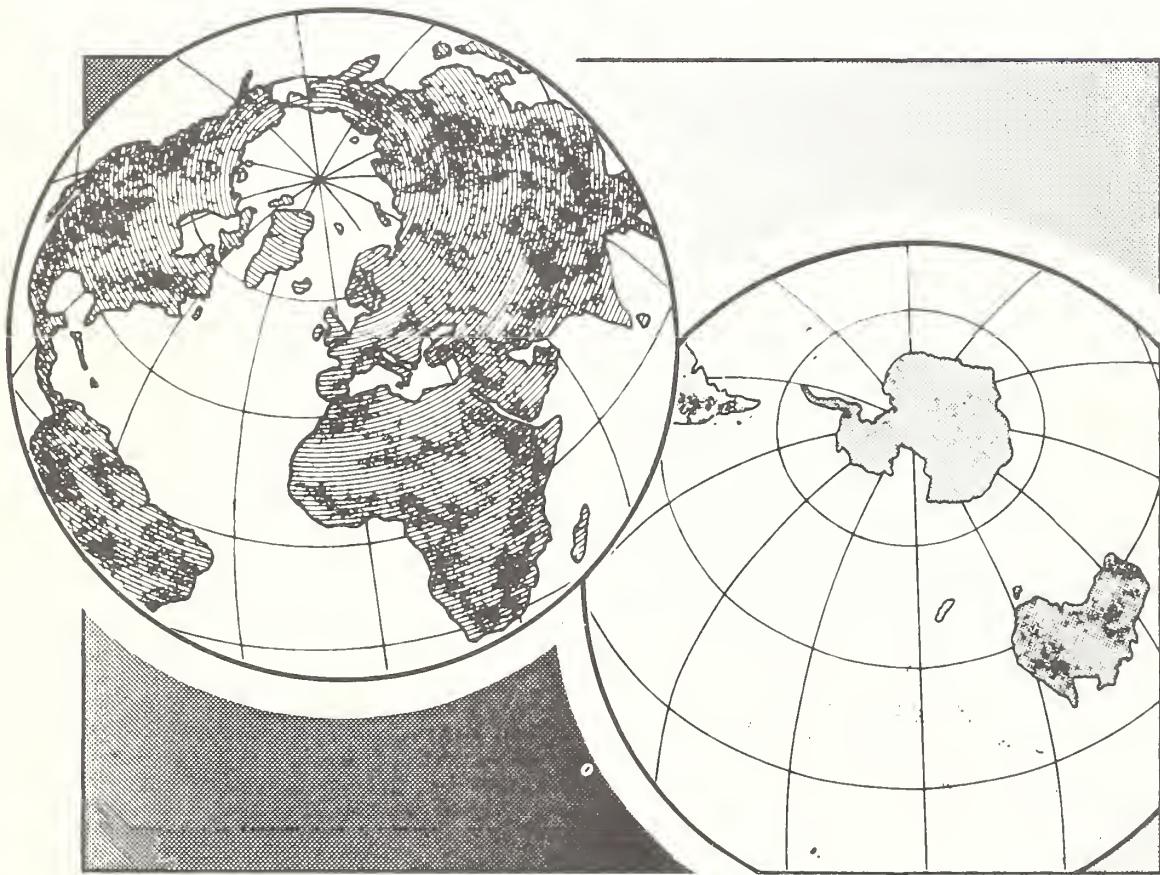
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# Brave Agricultural Situation

Review of 1979 and Outlook for 1980

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## Eastern Europe



United States Department of Agriculture  
Economics, Statistics, and Cooperatives Service  
Approved by the World Food and Agricultural Outlook and Situation Board

EASTERN EUROPE AGRICULTURAL SITUATION, REVIEW OF 1979 AND OUTLOOK FOR 1980.  
Eastern Europe and USSR Branch, International Economics Division, Economics, Statistics, and Cooper-  
atives Service. Supplement no. 3 to WAS 21. Approved by the World Food and Agricultural Outlook and  
Situation Board.

**ABSTRACT:** In 1979 gross agricultural production remained at 1978 level. Grain, rapeseed, and sugarbeet production was down, potatoes, sunflowerseed, soybean, and tobacco production was up. The number of cattle declined, the number of hogs, sheep and poultry increased. Total meat production was up 2 percent. U.S. agricultural exports to the region amounted to \$2.1 billion in 1979 with further increase in prospect in 1980. Plans call for faster increase in crop production than in livestock production.

**KEYWORDS:** Eastern Europe, plans, weather, crops, livestock, trade values, agricultural trade, agricultural investment, and agricultural policy.

## FORWORD

This report reviews and analyzes major developments in the food and feed sectors of Eastern Europe during 1979 and provides information on the outlook for 1980. Emphasis is given to those commodities where developments in Eastern Europe can be expected to influence the demand for imports, particularly those supplied from the United States.

The report updates and supplements data found in Supplement 3 to WAS 18, Eastern Europe Agricultural Situation, Review of 1978 and Outlook for 1979. It is one of seven regional publications on the world agricultural situation. Other reports are being published on the USSR, Western Europe, the Western Hemisphere, Africa and West Asia, Asia and Oceania, and the People's Republic of China.

Thomas A. Vankai directed and coordinated preparation of this report. Sections of the report

were written by Edward Cook, Allen A. Terhaar, and Thomas A. Vankai. Peter Vache assisted in the compilation of statistical data. Information submitted by the U.S. Agricultural Attaches in Belgrade, Berlin, Bucharest, Vienna, and Warsaw is acknowledged with appreciation.

The statistical data given in the tables of this report were taken from the statistical yearbooks of the respective countries or from the yearbooks of the Council for Mutual Economic Assistance unless otherwise indicated.

Any comments, suggestions, or questions concerning this report should be addressed to Eastern Europe and USSR Branch, International Economics Division, Economics, Statistics, and Cooperative Service, USDA, Room 314, 12th Street, S.W., Washington, D.C. 20250. Phone (202) 447-8380.



Anton F. Malish, Chief  
Eastern Europe and USSR Branch  
International Economics Division

## TERMS AND MEASURES

### Terms

Agricultural land--Cultivated land, gardens, orchards, meadows, and pastures.

Agricultural trade--Raw materials for food and fiber; feeds; and food and food products.

### Eastern Europe:

Northern countries--Czechoslovakia, German Democratic Republic, Poland.

Southern countries--Bulgaria, Hungary, Romania, Yugoslavia.

Transshipments--United States exports destined to Eastern Europe unloaded in Canada or Western Europe and reported by the U.S. Census Bureau as exports to the port of entry.

### Units

Metric units are used throughout:

One metric ton = 2,204.6 pounds

One quintal = 100 kilograms

One kilogram = 2.2046 pounds

One hectare = 2.471 acres

### Conversion factors

Cowhides: one piece = 20 kilograms

Milk: one liter = 1.031 kilograms

Soybeans: one unit = 79.5 percent soybean meal equivalent, or  
18.0 percent soybean oil equivalent.

### Exchange rates as of June 1979

		Official rate per U.S. \$	Tourist rate per U.S. \$
Bulgaria	Lev	0.88	1.31
Czechoslovakia	Korunas	5.45	9.54
GDR	Marks	1.90	1.90
Hungary	Forints	35.58*	17.79
Poland	Zlotys	3.106	31.06
Romania	Lei	4.47	12.00
Yugoslavia	Dinar	18.44	18.44

\*Commercial rate.

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## Eastern Europe Agricultural Situation

### REVIEW OF 1979 AND OUTLOOK FOR 1980

#### SUMMARY

In 1979, gross agricultural production in Eastern Europe probably remained at about the 1978 level. Increases in Bulgaria, Romania, and Yugoslavia were offset by declines in the other East European countries.

Delayed fall sowing, a severe winter, and summer drought reduced aggregate crop production. The livestock sector, however, registered slight gains. With planned modest growth in investment the weather will be a decisive factor for the 1980 crops. As of mid-March, weather had been more favorable for crop development than it had been in 1978/79.

East European grain output in 1979 dropped to 90.7 million tons, 5.4 percent below the record 1978 crop. Wheat production plummeted 24 percent to 27.1 million tons. Corn, the only grain to surpass the 1978 harvest, reached a record 34.2 million tons. An estimated 17 million tons of grain will be imported by the East European countries during 1979/80 (July-June basis). The United States is expected to supply 10-11 million tons of that total.

The combined harvested area of principal oilseeds decreased 2 percent in 1979, with production declining 7 percent to 3.6 million tons. A very poor rapeseed crop was not completely offset by increased sunflower and soybean harvests. Consumption of vegetable oil and oilmeal—the principal derivatives of oilseeds—was fairly stable. Total oilmeal imports fell somewhat partly because of a shift to oilseed imports. It is estimated that about 3.5 million tons of soybean meal and 760,000 ton of soybeans were imported in 1979. U.S. exports of soybean meals and soybeans to Eastern Europe were at a record level in 1979—1.6 million tons and 0.7 million tons, respectively. It is expected that Eastern Europe's combined 1980 imports of soybeans and soybean meal in meal equivalent will approximate the 1979 level.

Sugarbeet production fell 3 percent in 1979 to 46.3 million tons on a slightly reduced harvested area. Poland, Hungary, and the German Democratic Republic (GDR) had smaller crops than in 1978. Potato production grew 6 percent in 1979 to 74.8 million tons on a slightly increased area.

Poland and the GDR, the two primary producers, both had larger potato harvests. After a poor spring performance in 1979, forage production recovered and a good-to-excellent overall crop helped alleviate the very tight feed conditions caused by the sharply reduced grain crop. Tobacco production and yields increased in 1979, with Bulgaria leading in output growth.

Growth in livestock herds slowed due to the poor grain crop and increasing production costs. Livestock inventories declined in both Yugoslavia and Poland. Animal product output grew but fell short of the 1978 growth rate.

Hungary, Bulgaria, and Yugoslavia drastically raised retail prices for livestock products in order to slow consumption and reduce subsidies. Poland and the GDR resorted to special marketing measures or quality changes to make price increases for livestock products more acceptable to the consumer.

Foreign exchange problems persisted in 1979, and borrowing from Western banks was estimated at \$4.1 billion in 1979. Net hard currency debt accumulation was estimated at \$60.5 billion up from \$50 billion in 1978. The region's overall trade balance, as well as the trade balance in agricultural commodities, worsened during 1979.

U.S. agricultural exports to the region reached a record level of \$2.1 billion in 1979, while U.S. agricultural imports from the region declined slightly. The United States has continued its export promotion efforts. Poland has been the principal beneficiary of Commodity Credit Corporation (CCC) credits. In FY 1980, Poland received \$200 million in direct credit and \$300 million in the form of credit guarantees to the lender. The U.S. export outlook for 1980 is promising and export value is expected to exceed the 1979 level. As in preceding years, exports will be dominated by grains, oilseeds and oilseed products.

Pressures to limit investment spending affected agricultural investments in all countries of the region in 1979. Progress continued with respect to mechanization, although some of the more advanced countries have reduced emphasis on the

expansion of tractor numbers. Romania and the GDR have made the greatest strides in the expansion of irrigable area. Deficiencies in domestic transportation networks, pressures on the energy supply, and the need to improve the balance of trade limited expansion of fertilizer use in 1979. Bulgaria and Romania are the only East European countries to show significant growth in this respect.

Only Yugoslavia exceeded its industrial growth plan for 1979, and only Bulgaria and Yugoslavia reached their agricultural growth targets. Both Bulgaria and Romania took measures during the

year which shifted greater managerial responsibilities to local administrators. In various ways, most East European countries moved to encourage small-scale, private farming activities.

Published plan indicators for national income suggest either low growth rates, or no increase in 1980. Higher rates of increase in agricultural output are planned for Czechoslovakia, Hungary, and Poland in 1980, but slower growth is expected for the others. In all of Eastern Europe, crop production is planned to increase faster than livestock production to reduce demand for imported feeds.

## MOST PLANNED GOALS NOT ACHIEVED

In most of Eastern Europe, economic performance in 1979 failed to meet planned goals. Only Bulgaria and Yugoslavia achieved the increases hoped for in national income. Yugoslavia was the only country to achieve the planned target for industrial production, and only Bulgaria and Yugoslavia met targets for agricultural production. Agricultural production grew at the fastest rate in Bulgaria (7 percent above the level of the previous

year), while Romania and Yugoslavia recorded growth rates of 5 percent, and production elsewhere either stagnated or declined. Overall, agricultural output in the region probably remained at about the 1978 level. For many key indicators in most East European countries, 1980 targets are modest and lower than they were in 1979 as shown in the following table. (Thomas A. Vankai)

Principal plan indicators, Eastern Europe,  
1979 and 1980

Item	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia
<i>Percent Increase</i>							
National income							
1979 plan .....	7.0	4.3	4.3	3-4	2.8	8.8	6
1979 actual <sup>1</sup> .....	7.2	2.6-2.8	4.0	1-1.5	2.0	6.2	6-7
1980 plan .....	5.7	3.7	4.8	3-3.5	1.4-1.8	8.8	5
Industrial production							
1979 plan .....	7.8	4.5	5.5	4	4.9	10.9	7
1979 actual <sup>1</sup> .....	6.6	3.7	4.8	2.5-3	2.8	8.0	8
1980 plan .....	6.3	4.0	4.7	3.5-4	3-4.2	11.5	6
Agricultural production							
1979 plan .....	7.0	3.8	1.3	3-3.5	3.3	5.1-5.6	5
1979 actual <sup>1</sup> .....	7.0	3.9	NA	0	-1.4	5.0	5
1980 plan .....	3.7	7.2	0	5-5.5	9.4	4.7-6	3
Capital investment							
1979 plan .....	5.1	2.4	5.6	3.2-4.2	-5.0	9.1	7
1979 actual <sup>1</sup> .....	3.4	1.6	-5.5	0	-8.2	5.1	7.5
1980 plan .....	4.9	2.4	0	-4.5	-9.2	4.9	6
Per capita real income							
1979 plan .....	3.2	4.3	4.0	2	1.1-1.4	6.4	2
1979 actual <sup>1</sup> .....	2.1	2.5	3.4	-1-1.5	2	2.1	NA
1980 plan .....	3.0	2.2	4.0	0	1-1.3	9.6	NA

<sup>1</sup> Preliminary. NA= Not available.

## WEATHER HIGHLY UNFAVORABLE FOR SMALL GRAIN IN 1979

Weather conditions in Eastern Europe in 1978/79 were uniformly poor for winter crop growth. Sowing in 1978 was delayed by an overly wet September. The following two months proved to be very dry and cold, which hampered grain emergence and hardening. Snowfall came too late in the northern countries to protect the poorly established grain from winterkill. Late snows were unusually heavy and caused winter rot in rapeseed fields and created conditions for spring floods. Floods in Poland were the worst in this century. Winter damage to grain was much higher than normal, and over 30 percent of the region's rapeseed was plowed under due to the adverse weather.

The spring overabundance of rain turned suddenly into a drought lasting from the second week in May until after mid-June. Winter grains suffered a second severe setback.

After mid-June, another turnaround in the weather dramatically improved the outlook for corn, potatoes, fodder crops, fruits, and vegetables. Corn growing weather was near perfect, leading to record-breaking yields and a record crop. But the rains came too late to revive the winter grains, and actually interfered with the grain harvest. The result was a further deterioration in the small grain harvest.

### Good Start for 1980

Weather conditions in the fall of 1979 were almost the exact opposite of those a year before. Dry sowing conditions were followed by abundant late-fall moisture accumulation and milder-than-normal temperatures. Except for some scattered dry pockets, sufficient moisture was present for grain to emerge rapidly, and in most areas it was hardy and well-established when winter arrived. Over most of Eastern Europe, therefore, grain prospects are decidedly better than they were a year before.

One notable exception is Yugoslavia where a trend toward late-maturing corn delayed sowing of winter grain. Wet fall weather set in before sowing was completed. The poor fall sowing conditions reduced winter grain area below plan and are likely to adversely affect 1980 output in Yugoslavia.

### Output of Small Grains Declines Sharply, Corn Sets Record

Area sown to grain remained constant at 28.9 million hectares (table 1). Wheat and rye area declined due to poor fall sowing conditions and the spring plowdown of winter-damaged fields. Barley, oats, and corn were expanded to offset the

decrease. Harvested wheat area dropped nearly a million hectares below the 1978 harvested area. Hungary, Poland, and Czechoslovakia had the largest declines in wheat area. The area of corn harvested for grain reached 8.0 million hectares for the region. Corn for grain area expanded in all East European countries except Poland and the GDR, which again harvested almost no corn for grain.

Total grain production in Eastern Europe amounted to about 90.7 million tons, a decline of 5.4 percent from the record 1978 crop (table 2). Production of grains other than corn declined 17.5 percent and totaled 56.4 million tons. Partially offsetting the sharp decline in small grain output was a record corn crop of 34.2 million tons, some 16 percent above the previous record set in 1976. Harvested grain quality was better than it was in previous years, but spoilage due to lack of sufficient drying and storage capacity continued to be a problem.

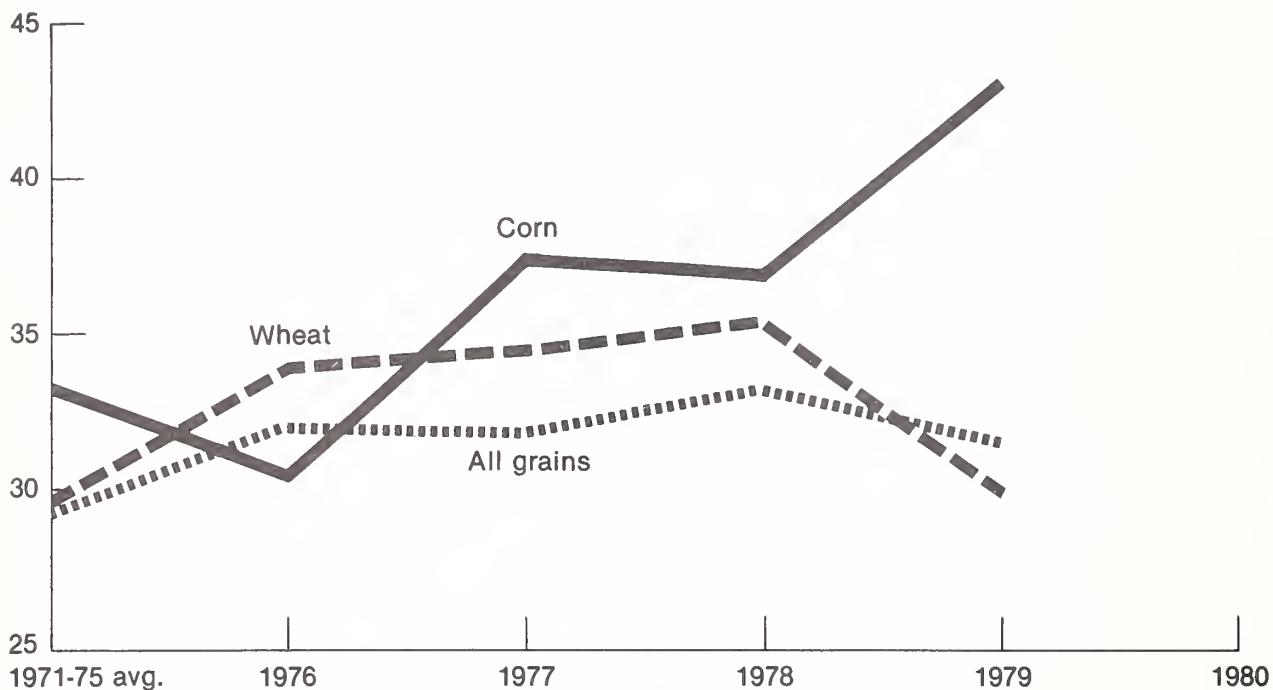
The 1979 grain crop shortfall hurt the grain-deficit northern countries more than the southern countries. Grain production decreased in Poland by 20 percent, in Czechoslovakia by 16 percent, and in the GDR by 8 percent. Among the southern countries, only Hungary had a smaller crop than in 1978. The record corn crop in the other southern countries was large enough to more than offset the poor performance of other grains.

The most notable aspect of the 1979 grain crop was the poor performance of winter grains in both the northern and southern countries. Approximately 95 percent of East European wheat is winter wheat. In 1979, total wheat production was 24 percent below that of 1978. Czechoslovakia, Hungary, and Poland suffered declines of 30 percent or more from their 1978 wheat output due to a combination of reduced acreage and lower yields. Rye—grown mainly in the northern countries—declined 25 percent in 1979. As the region's largest rye producer, Poland accounted for much of this shortfall with a 30-percent drop in its rye crop.

Helped by near perfect corn-growing weather, corn yields reached a record 43.0 quintals per hectare (see graph). Yugoslavia recovered from its disastrous 1978 crop and set a new record for corn output. The Czechoslovakian corn crop neared 1 million tons for the first time ever. Romania, the region's largest corn producer, harvested a corn crop more than 20 percent larger than a year earlier. The quality of corn harvested for grain was also better than in 1978. Harvest conditions for corn were good to excellent and the crop was brought in with relatively low moisture content.

## Eastern Europe Grain Yields

Quintals/hectare



### Grain Imports To Rise

The poor 1979 grain crop forced East European countries to draw down stocks, cut grain exports, and increase imports in 1979/80.<sup>1</sup> Total grain imports for July-June 1979/80 are expected to exceed the previous year's total by 2.3 million tons and reach 16.5-17.5 million tons. Net imports (imports minus exports) should reach record levels. Coarse grain imports are expected to remain at or slightly exceed 1978/79 levels, while wheat imports should increase by approximately 2 million tons.

East European wheat imports are estimated to increase by 50 percent, to around 6 million tons. Wheat imports into Eastern Europe are used mainly for feed, and the decision whether to import wheat or coarse grain for feed normally depends on the price spread between different grains. In 1979/80, however, wheat imports for milling are up substantially, spurred by large GDR, Czechoslovakian, and Yugoslavian imports for this

purpose. Yugoslavia is likely to raise its wheat imports from the past 5-year average of less than 400,000 tons to about three times that amount in 1979/80.

East European countries will export fewer than 500,000 tons of wheat in 1979/80, with the bulk of that originating in Romania. Hungary, the region's other significant wheat exporter, cannot be expected to export wheat from its small 1979 crop.

Despite the East European record corn crop, coarse grain imports are predicted to reach approximately 10.5 million tons in order to maintain record livestock herds and meat production. Corn imports are estimated at about 6 million tons, barley at 3.2 million, and other coarse grains at 1.3 million. Coarse grain exports from Eastern Europe are anticipated to decline to around 1.5 million tons unless the USSR emerges as a major buyer.

The northern countries will be most seriously pressed to expand grain imports. The southern countries will be able to substitute relatively abundant domestic corn for other grains in feed rations, but the northern countries do not have this option. Grain imports, however, are not expected to rise enough to fully offset the 1979 crop shortfall. Extensive foreign indebtedness, tight international

<sup>1</sup>July-June import estimates are used to reflect the influence of one crop year on imports. East European countries—except Poland and Yugoslavia—only report import figures on a calendar year basis. See Tables 5 and 12 for calendar year grain trade.

credit, and transportation bottlenecks will preclude expanding grain imports beyond the 16.5-17.5 million tons projected. Poland, which alone accounts for half the grain imports of Eastern Europe, will have difficulty expanding grain imports beyond the 8.9 million-ton level due to both financial difficulty and lack of available transport capacity. Instead, Poland and other East European countries will probably make full use of the good 1979 forage crop and try to improve feeding efficiency in order to conserve grain. Some downward adjustment in animal herds may also take place.

The United States increased its share of East European grain imports in 1979/80. United States grain exports to Eastern Europe rose from 5.2 million tons in 1978 to 8.9 million in 1979 (table 12). For the 1979/80 July-June year, the United States is projected to supply about 11.0 million tons—or over 60 percent of total East European grain imports. The United States is expected to supply more than 50 percent of the region's wheat imports, a sharp increase in its share from previous years.

Canada, Argentina, and Western Europe are the chief U.S. competitors for the East European grain market. Poland has an agreement with France to purchase up to 800,000 tons of grain annually and a similar agreement with Canada for 1.1.5 million tons annually. The USSR—a previous supplier of grain to Czechoslovakia, Poland, and the GDR—is not likely to export any grain to these countries in 1979/80 because of its own import needs.

Credit continues to play an important role in East European grain trade. Canada, France, and Great Britain have each established credit lines to finance grain exports to Poland. In FY 1979 (October-September) the United States sold 3.1 million tons of grain to Eastern Europe under CCC financing, 2.1 million to Poland, and 1 million to Romania. The cut in CCC credit allocations in FY 1980 and higher grain prices will decrease the amount of U.S. grain going to Eastern Europe under Commodity Credit Corporation (CCC) credit arrangements. In contrast to the large quantity of CCC financed grain exports to Romania in FY 1979, that country has requested but not received CCC credit for grain purchases to date in FY 1980. Only Poland will continue to import U.S. grain on credit in FY 1980 under a package of direct CCC credits and GSM 101 U.S. Government Assured Commercial Loans.

#### **Grain Area To Be Expanded in 1980**

The serious 1979 crop shortfall and increased grain import burden have continued to make

higher grain production a priority for Eastern Europe in 1980. Though increased grain output was also a priority in the 1979 annual plans, conditions to-date for fulfilling this goal appear better in 1980 than in 1979.

Food and feed grain area is likely to increase slightly in 1980. Favorable 1979 fall sowing conditions facilitated an increase in area sown to winter grains. Winter barley and winter wheat area are planned to increase the most across the region. Rye area in Poland will probably return to pre-1979 levels of around 3.0 million hectares in 1980. Corn for grain production continues to be emphasized in the southern countries and Czechoslovakia, while Poland and the GDR will probably continue to raise corn only for silage.

The East European countries, except for Yugoslavia, are likely to realize their goal of expanding winter grain production. Sowing of winter grains was completed comparatively early in the fall of 1979 and within the optimum sowing period. Weather conditions for sowing, germination, and winter hardening of grains were generally much better than in the fall of 1978. Fertilizer availability and application were probably as good or better than the previous year. Moisture conditions and snowcover have been adequate and the 1979/80 winter was milder than a year earlier.

The outlook in Yugoslavia is quite different. The late 1979 harvest of corn and sugarbeets delayed winter grain sowing, and around 30 percent of grain was sown beyond the optimum dates. Farmers were not able to sow wheat on all the planned 1.7 million hectares. Furthermore, extensive flooding during mid-November covered 330,000 hectares of arable land in the southern Yugoslavian republics, most of which had been recently sown to winter wheat. Vojvodina, the Yugoslav "breadbasket", was not as seriously affected as the other republics, but early indications point to another poor wheat year in 1980.

Based on present plans, livestock herds, and crop conditions to date, Eastern Europe is likely to increase grain output in 1980 over the poor 1979 crop, while remaining a large importer of grain. If the 1980 crop attains or exceeds the level of the 1978 record crop, total grain imports into the region are likely to decline from the 1979/80 estimated record level. The U.S. share of that reduced market would depend on persistent marketing and on its competitive stance vis-a-vis the other suppliers of grain to Eastern Europe. (Allen A. Terhaar)

## OILSEED PRODUCTION, CONSUMPTION, AND TRADE

### Rapeseed Production Down Drastically, Soybean Production Up

Oilseeds in Eastern Europe are sown on about 4 percent of arable land. Sunflowerseed is the leading oilseed followed by rapeseed and soybeans. Sunflowerseed and soybeans are principally sown in the southern countries, while the northern countries are the principal rapeseed producers (tables 3 and 4). The combined harvested area of sunflowerseed, rapeseed, and soybeans decreased 2 percent in 1979. Sunflowerseed and soybean area continued to expand, but did not completely offset the large decline of rapeseed area. Unfavorable seeding conditions, winter rot under heavy snow, and overabundant weeds during a wet spring forced farmers to plow under large areas of rapeseed, especially in Poland. Sunflowerseed and soybeans in the southern countries replaced wheat where planned planting was not performed in the fall. Thus, in Hungary, the sunflower area exceeded the target.

In 1979, in addition to the increased area, the yields of sunflowers and soybeans also attained record levels, resulting in 2.3 million tons and 0.6 million tons, respectively. In contrast, rapeseed production (0.7 million tons) turned out to be the smallest in the decade. Sunflower production almost doubled in Hungary and increased 9 percent in Romania, where soybean production was also up significantly. Wider use of hybrid varieties together with favorable weather conditions contributed to the good sunflowerseed harvest. However, in Yugoslavia, plant disease just before harvest reduced what was an even more promising crop. Soybean production was stagnant in Hungary and Yugoslavia because it was more profitable to grow sunflower or corn instead. Bulgaria and Romania, with larger areas of irrigable land, had better success in promoting soybean production.

### Vegetable Oil and Oilseed Meal Consumption Stable

Oilseeds are important as a source of feed, vegetable, and industrial oil. Oilmeal consumption in 1979 remained close to the 1978 level of 5.9-6.0 million tons (see table below) despite an increase in livestock numbers. Soybean meal, which makes up about 70 percent of total meal fed, is the principal protein meal of the region and its share has been growing. Of the total soybean meal consumed in Eastern Europe, approximately one-fourth was processed in domestic mills, half of which was from imported beans. The domestic crushing capacity increased in Yugoslavia in 1979.

### Oilseed meal utilization, Eastern Europe, 1976-79

Item	1976	1977	1978	1979 <sup>1</sup>
1,000 tons				
Processing from domestic crops <sup>2</sup>				
Soybean meal ...	248	283	275	319
Sunflower meal ..	486	468	626	621
Rapeseed meal ..	585	631	540	625
Net imports				
Total meal .....	3,934	4,006	3,950	3,777
Soybeans <sup>3</sup> .....	272	220	489	600
Sunflowerseed <sup>3</sup> ..	33	54	23	20
Apparent meal consumption .....	5,558	5,662	5,903	5,962

<sup>1</sup> Preliminary. <sup>2</sup> Estimated from preceding year's production.

<sup>3</sup> Converted to meal equivalent.

Vegetable oil consumption has remained fairly static. Per capita consumption was lowest in the GDR and Hungary where butter and animal fats are still the mainstay of cooking. Consumption growth paralleled population growth in Czechoslovakia, but a slight upward trend in per capita consumption is evident in Bulgaria and Hungary (table 14).

### Oilseed Meal and Vegetable Oil Imports Down, Oilseed Imports Up

Eastern Europe is a major importer of oilseed meal and fish meal, while it both imports and exports oilseeds and vegetable oils (table 6). The precarious hard currency position and debt repayment obligations in most East European countries forced the respective governments to limit imports. A shift to oilseed imports, a restrictive import policy, and increased domestic oilseed production have caused total oilmeal imports to decline somewhat from their 1977 peak. Like all other commodities, imports of oilseed meal are closely controlled. Even in the more market-oriented Yugoslav economy, the hard currency allocation for meal imports has been subject to central bank approval. While demand for feed influences government decisions, monetary considerations ultimately determine the import volume.

Soybean meal makes up more than 80 percent of imported oilmeal. The share of soybean meal in any given year depends on the availability of peanut meal from India and fishmeal from Peru. Brazil has been the leading source of East European soybean meal imports, but the U.S. share increased significantly in 1979. Western Europe is also an important supplier of soybean meal. It exports soybean meal processed domestically from seed

imported principally from the United States. The GDR and Poland, the leading oilseed meal importers, account for more than one-half of total East European imports.

The region imported a record 760,000 tons of soybeans in 1979 with Romania, Poland, and Yugoslavia being the principal recipients. The GDR and Czechoslovakia are the region's principal importers of sunflowerseed. The United States is almost the sole supplier of soybeans to the region and is second only to Hungary in exports of sunflowerseed to East European countries. Hungary exported a total of roughly 90,000 tons of sunflowerseed in 1979, compared with 55,000 tons in 1978. Poland, a regular exporter of rapeseed, accumulated hardly any exportable surplus in 1978 and 1979.

Romania is the region's principal exporter of sunflower oil followed by Hungary. Poland is a regular exporter of rapeseed oil. The GDR and Austria are the leading countries of destination for both of these oils. Yugoslavia was a sizable importer of vegetable oil until 1976, but became a small exporter in 1978 and 1979 (table 6).

#### **Imports of Soybeans and Soybean Meal From United States Increased in 1979**

Eastern Europe imported a record quantity of soybeans and soybean meal from the United States in 1979 (table 12). Poland utilized CCC credits for its soybean and soybean meal purchases. Hungary's soybean meal imports slightly exceeded its CCC credit line. Yugoslavia's soybean imports were much above the credit purchases.

The United States was the primary supplier of soybeans and was second behind Brazil in soybean meal exports. The U.S. soybean meal exports in 1979 increased to Bulgaria, Czechoslovakia, the GDR, and Romania, but declined to Hungary,

Poland, and Yugoslavia. U.S. soybean exports increased to Poland, Romania, and Yugoslavia.

#### **1980 Oilseed Outlook**

The increased area planted to rapeseed, and the planned expansion of spring sown oilseeds indicate increased output in 1980. In Poland, farmers reacted to a 12-percent increase in producer prices by expanding rapeseed planting by more than 100,000 hectares to over 500,000 hectares. Other countries are also encouraging rapeseed production. To increase rapeseed meal in feed rations, researchers in Eastern Europe have been experimenting with varieties with reduced erucic acid content. The "Janpol" variety in Poland is free of erucic acid and will be cultivated in five districts. This variety, however, yields 15-20 percent less than the traditionally used seeds and has slightly lower oil content. A quality improvement is expected in Hungary through the wider use of French "Primor" variety which has low erucic acid content, but whose use has not been fully tested.

At this writing it is not known how the rapeseed overwintered. Hungary reported uneven emergence because of dry conditions at sowing time, but no winter damage occurred as of the end of February. While increased rapeseed production is attractive because its early ripening permits fuller use of processing plants, it is not expected to replace other oilmeals because of its limited feeding value.

Based on import intentions of the individual countries, it is expected that the region's combined imports of soybean and soybean meal in meal equivalent in 1980 will approximate the 1979 level. Declines in Hungarian imports are expected to be offset by increased Polish imports. Czechoslovakia intends to use more alfalfa and slaughterhouse byproducts to cover the increase in protein feed demand. In Bulgaria, Romania, and Yugoslavia, increased domestic oilseed production should take care of the additional demand. (Thomas A. Vankai)

### **OTHER CROPS**

#### **Sugarbeets and Sugar**

In spite of the desire on the part of some East European countries to expand sugarbeet area, aggregate figures for 1979 show a slight drop from 1978 levels. The area harvested increased in Yugoslavia, Bulgaria, and Romania, but was essentially unchanged in Czechoslovakia. A 13-percent decline in area in Poland and a slight decline in Hungary and the GDR more than offset the increases. Sugarbeet production was down only marginally with yields increasing very slightly

(table 4). Production was up strongly in Bulgaria, Czechoslovakia, and Yugoslavia, up slightly in Romania, and down in Poland, Hungary, and the GDR. For the region, sugarbeet production totaled 46.3 million tons in 1979.

Poland's shortfall in sugarbeet production was attributed to late spring planting and a drought in May and the first half of June which caused much of the crop to be plowed under. Sugar content remained at about last year's level (14.3 percent). Consequently, declines in sugar production and sugar exports are expected.

The GDR, like Poland, began spring planting roughly 2 to 3 weeks late. This lag was never made up and planting was completed later in 1979 than for any year since 1970. The resulting output of sugarbeets was down considerably (7.6 to 6.6 million tons), but perfect ripening conditions helped to attain a high sugar content level.

Hungary was the only country that purposely reduced area planted to sugarbeets in 1979. A 3-percent decrease in sugar production for the current marketing year is expected.

Yugoslavia had a record sugarbeet crop in 1979, due to increased area. This is in accordance with the government's desire to meet the refining industry's capacity as much as possible from domestic sources. With sugar content good, roughly 150,000 tons should be available for export. However, because the Yugoslav sugar refining industry is one of the highest cost producers in the world, government subsidies will be required to market this quantity abroad. Czechoslovakia, though one of the big gainers in 1979, remained well behind plan targets for both sugarbeet and sugar production. Bulgaria put greater emphasis on sugarbeet production in 1979 and recorded the highest rate of growth for the region—over 25 percent.

Sugar consumption for the region on a per capita basis stabilized in the 1970's. In 1978, sugar consumption ranged from 33 kg per capita in Yugoslavia to 43 kg per capita in Poland (table 14). At present, the region remains a net importer of sugar, mostly from Cuba. Even those countries which are traditionally net exporters (Poland and Czechoslovakia) have long-term contractual agreements to import Cuban sugar.

The 1980 plans call for increased sugarbeet area in most countries. The Polish Government recently announced producer price increases of over 25 percent in order to regain previous area and output levels. Yugoslavia also announced producer price increases for 1980, and plans call for a 22-percent increase in area planted. However, because of rapidly rising input costs and increases in producer prices of other crops, the area planted to sugarbeets is expected to fall short of the announced goal.

### Potatoes

Area planted to potatoes increased slightly in 1979 to 3.9 million hectares (table 3). An increase in area for Poland, Romania, and Bulgaria was partially offset by decreases in Hungary, the GDR, and Czechoslovakia. Production for the region was up by more than 6 percent to 74.8 million tons (table 4), and generally good harvesting conditions probably minimized losses. Poland, which alone accounts for two-thirds of potato production in

Eastern Europe, harvested a near-record crop of 49.6 million tons. This development, combined with a 6-percent increase in production in the other countries, resulted in a near-record harvest of potatoes.

The GDR was able to overcome problems with early potato blight to harvest a crop of 12.5 million tons, well above last year's on a reduced area. The quality of the crop was said to be good.

Potatoes continue to be an important feed source in the northern countries, particularly on private farms and private plots. In Poland, for instance, roughly 60 percent of the potato crop is used as feed, while in the GDR this share is slightly over half. Area planted to potatoes, however, will probably resume its secular decline in 1980, primarily because of the need to improve feed rations through the greater use of grains and oilmeal. The extent of this decline will depend largely on the Polish Government's ability to convince private farmers of the desirability of this shift in feed sources, and to provide the means for it to be accomplished.

Per capita consumption of potatoes remains high in the northern countries. Consumption in Poland (166 kg) and the GDR (139 kg) is roughly three times the U.S. level, while in Czechoslovakia (88 kg) consumption is at twice the U.S. level.

### Tobacco

Production of tobacco in 1979 amounted to 369,000 tons, an increase of 10 percent over 1978 when poor weather hampered all phases of production, especially harvesting and drying (table 4). This year's more normal conditions allowed yields to increase 7 percent, while area harvested increased by 3 percent. Bulgaria, the area's largest producer and by far the major supplier of tobacco products for export, recorded a good increase in output to 162,000 tons. Other countries showing production gains were Yugoslavia and Romania.

In Yugoslavia, poor weather and discouraging results the last 3 years as well as the labor intensive nature of the crop have led many farmers to abandon tobacco production. To counter this trend, the Yugoslavian Government increased producer prices by roughly 10 percent in the spring of 1979 on top of increases the previous year. The policies seemed to have been only moderately successful in 1979, as Yugoslavia increased tobacco area by only 3 percent.

Poland also has suffered from a string of poor tobacco seasons and is hoping to regain area and production levels of 3 years ago. In January 1979, producer prices were increased by 25 percent, but this announcement seems to have come too late as

tobacco area fell well below plan and showed no increase over the 1978 level.

The United States exports tobacco to Poland, Yugoslavia, and Bulgaria, but for the region as a whole, the United States is a net importer. In 1979, U.S. exports of tobacco rose 18 percent and reached a value of \$17.4 million. For the same period, U.S. imports of tobacco from Eastern Europe fell more than 10 percent to a value of \$43.1 million.

Given sufficient incentives to private farmers in Poland and Yugoslavia, there is certainly room for a return of tobacco area toward the record levels of 1976.

#### Fruits and Vegetables

It was a good year for fruit and vegetable production in the northern countries, but the southern countries showed mixed results. For the northern countries, Poland reported vegetable production up 4.1 percent from 1978 levels to 4.7 million tons and fruit production up 3.5 percent to 1.8 million tons. Production was also up in the GDR, while in Czechoslovakia, vegetable production increased 9 percent but fruit production fell 16 percent.

For the southern countries, grapes showed outstanding performance. Hungary, Yugoslavia, and Romania all indicated increased output. A heat wave in May and early June was responsible for the good quality of the grapes. Vegetable production in Romania for 1979, at 3.5 million tons, was down 4 percent from the previous year's total and represented only three-fourths of the plan

target. However, fruit production skyrocketed by 36 percent to 1.8 million tons. Hungary has indicated that vegetable production was at or near plan for all major items except peas, which suffered from the early season drought and heat wave. Fruit production, however, fell by 10 percent to 1.2 million tons. In Yugoslavia, production of plums, an important export item, fell by 21 percent. All other major fruit items were up including apples, (14 percent); pears, (17 percent); apricots, (25 percent); and cherries, (28 percent).

#### Cotton

Cotton is currently grown on a relatively insignificant area of 23,000 hectares, primarily in Bulgaria, but also in Yugoslavia and Romania. Output of unginned cotton, which in 1978 totaled 18,500 tons, represented only about 1 percent of consumption. The USSR is the largest source of imports to Eastern Europe with an 80-percent share of the market.

The United States has been exporting cotton to Romania and Poland. In 1979, the United States also began cotton exports to Hungary and Yugoslavia. In 1979, the United States exported 33,100 tons to these four countries, representing roughly \$50 million in sales and 4.5 percent of the region's imports.

The outlook is for continued decreases in cotton area and production due to the region's disadvantage in this crop. Soviet yields, for example, are three to four times higher. (*Edward Cook*)

### GROWTH OF LIVESTOCK SECTOR SLOWS

Growth of East European livestock herds slowed to the lowest rate since 1976 when distress slaughtering reduced herds. Sheep, hog, and poultry numbers continued to grow, but more slowly than in the previous 2 years (table 7). Overall cattle inventories stagnated despite government urging to increase ruminant numbers to make better use of domestic feed availabilities.

Poland and Yugoslavia experienced diminished herds due to feed shortages. Both cattle and hogs were affected. Most of the herd adjustment in Yugoslavia occurred in the fall of 1978, but some carried through into the 1979 summer before herd rebuilding began. Increases of more than 3 percent of hog inventories in Hungary and the GDR were surprisingly high considering government policies designed to encourage greater output through increased efficiency rather than herd size.

Total meat production in Eastern Europe increased by an estimated 2.1 percent in 1979 to a

record 12.1 million metric tons (table 8) Bulgaria, Poland, and Romania registered the largest increases in meat production, while Yugoslavia showed an estimated 7.5-percent decrease. Poultry output showed the strongest gain, but beef, mutton, and pork production were up as well. Pork output increased slightly for the region as a whole despite a more than 15-percent drop in Yugoslavian pork production. Gains in Polish meat production were the result of higher slaughter numbers rather than livestock sector growth.

Milk production is estimated to have declined in Poland and the GDR where the dairy industry never fully recovered from the effects of the severe 1979 winter weather. Egg output continued its upward trend in the region, but at a slower rate than in previous years (table 8). Egg output in Hungary declined as the high cost of protein feeds reduced profitability and competition for export markets became more intense.

Despite the difficult 1979 winter and spring weather conditions and the region's grain and oil-seed crop shortfall, East European policymakers were intent on holding livestock herds and animal product output at least at 1978 levels. Farmers were repeatedly assured that sufficient feed supplies would be made available. This decision resulted in record feed imports into the region, but reflected the determination of East European governments to preserve herds rather than resort to distress slaughtering as occurred in 1976. Good potato and forage harvests helped to alleviate the feed situation through the 1979/80 winter, and a larger grain crop is expected in 1980.

#### **Poland and Yugoslavia Faced Difficult Livestock Year**

In spite of official encouragement to expand herds in 1979, Poland's livestock inventories reversed their 1977 and 1978 growth trend. Extremely harsh winter weather conditions in the first 3 months of 1979 caused disruption of feed supplies to farms and of produce supplies to markets. Animals went to pasture late, then drought cut substantially into the yields of grains, rapeseed, and grasses. Fortunately, a near-record potato crop (important for hog feeding in Poland) and improved forage conditions in the late summer and fall alleviated the situation somewhat. Record level feed imports helped to replenish supplies.

Contrary to the 1976 experience, the decline in Polish hog numbers in 1979 took place mostly in the socialized sector. The drop in hog numbers on socialized farms is particularly interesting since these farms depend heavily on concentrated feed for their livestock. Most of Poland's imported feed is channeled to these socialized farms instead of to private farms. Sales of concentrated feeds to all farms dipped below the levels of previous years in late 1978. For 1979, sales were a full 20 percent below the 1978 level and showed no sign of rising.

State purchases of animals for slaughter in Poland, accounting for around 80 percent of total meat production, ended the year at 2.7 million tons, 5.7 percent ahead of the 1978 figure. Total meat output for the country is estimated to have increased 3.9 percent in 1979, but the diminished herd leaves the Polish livestock sector entering 1980 in poor condition. To encourage farmers to replenish herds and to market animals at heavier weights, the Polish Government raised cattle, hog, and milk producer prices at the end of 1979.

The Yugoslavian livestock sector faced a similarly difficult year. All livestock inventories, particularly hogs, fell below the January 1979 level. Hog numbers, which had declined 8.3 percent in 1978, fell another 0.6 percent in 1979 due to high

feed costs, feed shortages, and perceived low profitability. Swine herd rebuilding began again in the fall when the feed situation improved and purchase prices were raised more than 20 percent for all slaughter animals.

Yugoslav meat output declined in 1979 by an estimated 7.5 percent. Poultry production was the only bright spot with an estimated 7.9-percent increase. Milk output rose a modest 1.0 percent due to low profitability. Milk producers even withheld their product from key markets during the summer, preferring to feed or process it rather than to sell at the prevailing governmentally fixed price. Purchase price increases for milk were raised in November, at which time retail supplies returned to normal.

#### **Exports Emphasized**

East European countries continued to push for expanded exports of livestock and livestock products while keeping such imports to a minimum. Though final figures are not yet available, intra-East European trade in meat probably increased in 1979. Yugoslavia, for example, is estimated to have purchased about 5,000 tons of fresh pork from other East European countries in 1979, whereas only around 550 tons were purchased in 1978. Hungary and Romania also sold boneless beef and veal to Yugoslavia.

Yugoslavia is currently assessing the eventual impact of the Greek accession to the European Community (EC) on its exports of milk and beef to that country. Greece is the major market for Yugoslav beef and milk exports. A new economic and trade agreement between Yugoslavia and the EC in 1980 is expected to lead to larger exports of meat to those countries. Yugoslavian beef exports to the EC could more than double this year as a result. Other major markets for East European animal products have been the Soviet Union, Western Europe, and the Middle East. The Middle East has been a growing market for East European poultry, mutton, and beef exports as these countries search for hard currency earnings with which to finance their growing energy imports from sources outside the member-nations of the Council of Mutual Economic Assistance (CEMA).

Live cattle and hog exports continued to figure prominently in livestock exports from the GDR, Hungary, Romania, and Yugoslavia. Exports went mainly to CEMA members and to the Federal Republic of Germany (FRG), France, and Italy. The GDR alone is estimated to have shipped 400,000 slaughter hogs to the latter three countries in 1979. Italy and the Middle East are expanding markets for East European live sheep and lamb

exports. Romania, Bulgaria, Hungary, and the GDR were the largest exporters in 1979 and faced good prospects for growth in 1980.

East European livestock product trade with the United States continued to expand in 1979. Exports of canned pork to the United States increased very slightly in 1979 to 77,000 metric tons (table 13). The largest single exporter was Poland with 43,000 metric tons, followed in importance by Yugoslavia, Romania, Hungary, and Czechoslovakia. Exports of cheese from Eastern Europe to the United States also increased from 4,954 metric tons in 1978 to 7,785 tons in 1979. Romania and Hungary were the two largest suppliers.

Cattle hides and other skins continued to be the most important animal product exported from the United States to Eastern Europe in 1979 (table 12). U.S. cattle hide exports to Eastern Europe decreased 4 percent in 1979 to 3.4 million pieces. Sheep and lamb skin exports rose slightly to a total of 367,000 pieces. Romania was the largest importer of U.S. hides and skins with about 38 percent of the total. Poland, Yugoslavia, Czechoslovakia, and Hungary were other large importers. Polish imports of U.S. tallow increased from 7,721 tons in 1978 to 9,946 tons in 1979.

Imports of U.S. breeding stock (except poultry) were down significantly in 1979, probably due to hard currency restraints. However, imports of poultry breeding stock increased from 22,000 chicks in 1978 to 128,000 in 1979, while shell eggs for hatching rose from 1,300 to 2,200 dozen. Hungary was the largest importer of both chicks and eggs.

#### **Livestock Sector Expected To Remain Sluggish in 1980**

Higher retail prices in some countries can be expected to somewhat reduce consumer demand for animal products in 1980. Meanwhile, higher prices charged for concentrated feeds, decreased feed availability due to the poor 1979 grain crop, and slow growth in animal inventories are likely to hold livestock product growth to a sluggish pace in Eastern Europe this year. As part of a move to force more efficient consumption of concentrated feeds, Hungary raised prices charged to farms for such feeds by 20-30 percent and Czechoslovakia raised prices by an average of 13 percent. In Poland and Yugoslavia, free market feed prices can be expected to respond to both domestic shortages and higher import prices. These and other input cost increases will probably more than offset producer price stimuli, lessening the attractiveness of livestock production.

Bulgaria and Romania are likely to register the largest gains in animal numbers in 1980, while Yugoslavian herds will show signs of rebuilding. Other countries will undoubtedly suppress herd expansion, at least until the new grain crop is available. Ruminant and poultry categories are expected to receive official government favor, while hogs will be deemphasized. Hog raising continues to be attractive to East European farms, however, and pork remains a preferred meat. Improving feed efficiency, reducing mortality, and marketing at optimum weights will again be the elusive goals for farm managers in East European countries in 1980. (Allen A. Terhaar)

## **FOREIGN TRADE AND FINANCE**

### **Balance of Trade Deteriorated**

The region's negative trade balance—\$10.6 billion in 1977 and \$10.8 billion in 1978—further deteriorated in 1979 to \$11.3 billion (table 9). Yugoslavia ran the largest trade deficit, estimated at \$6.4 billion. Bulgaria achieved a surplus, the balance in Hungary and Poland improved slightly, while Czechoslovakia's deficit increased by one-fifth to \$1 billion. For most countries, the breakdown of hard-currency and ruble trade is not yet available. Only aggregate values of 1979 imports and exports have been reported. Between 1974 and 1978, the trade on ruble account increased faster than on hard-currency account (table 10). The negative ruble balance peaked in 1977 but while it declined in 1978, it remained at the second highest annual level. The escalation of raw material prices (especially of oil), the poor grain harvest, and inad-

equate restraint on domestic investments and consumption combined to trigger a new wave of imports with further deterioration in Eastern Europe's balance of trade.

Individual countries have chosen varying methods for managing their trade deficits. They borrowed funds from Western and CEMA banks, used credits tied to commodity purchases, issued bonds in international money markets, entered into joint ventures with foreign firms, and engaged in barter transactions. Borrowing from Western banks is estimated to have increased from \$3.2 billion in 1978 to \$4.1 billion in 1979. The net hard currency debt accumulation is estimated to have grown from \$50 billion in 1978 to \$60.5 billion in 1979. Despite the sizable debt, to date all East European countries have met their repayment obligations.

In 1979, Yugoslavia obtained a \$700-million loan and in 1980 a \$420-million loan from a consortium of Western banks for repayments of previous loans obtained at less favorable terms. Yugoslavia's debt service of \$1.8 billion in 1979 approximated 22 percent of its hard currency earnings. Yugoslavia experienced a devastating earthquake in 1979 on the Montenegrin coast. Besides diverting funds to rebuild the damaged area, the earthquake adversely affected tourism, and earnings from this important source declined which aggravated the country's balance of payment. To enhance Yugoslavia's opportunity to export, the EC signed a cooperation agreement with Yugoslavia in February 1980. This agreement lowers the barrier for Yugoslav exports of certain industrial products and for the traditional agricultural exports of fruits, wine, and "baby beef".

The National Bank of Hungary formed a partnership with six European and Japanese financial institutions to establish the Central-European International Bank Ltd., situated in Budapest. This bank will facilitate short-term financing of trade, finance investments, and promote joint ventures. The Bank has a capital stock of \$20 million supplemented by \$15 million of standby credit. Majority ownership rests with the six Western banks (66 percent), while 34 percent rests with the National Bank of Hungary. It is the first bank in a CEMA country with majority ownership held by Western banks.

#### Agricultural Trade Negative

Data for 1979 agricultural trade values are not yet available. It is anticipated, however, that the negative balance, which has persisted since 1974 (table 9), reached record-high levels in agricultural trade. The balance ranged between \$2.1 billion in 1975 and \$3 billion in 1976.

In 1978, agriculture accounted for 10 percent of total exports and 12 percent of total imports. Bulgaria, Hungary, and Romania have had a positive agricultural trade balance which was more than offset by the negative balance of the other four countries of the region. Poland is the region's largest importer of agricultural products, followed by the GDR and Czechoslovakia. Cotton, grain, oilseed products, cattle hides, wool, and coffee are the region's principal agricultural imports; meat, tobacco, grains, fruits, vegetables, and wine are the principal agricultural exports. The agricultural trade in 1979 followed past patterns. Though Hungary reported a slight decline in total agricultural exports because of the shortfall in the wheat harvest, hard currency exports increased 16 percent. Some hard currency trade has been conducted among CEMA members, usually when commodities were traded above the planned level.

#### World Bank Loans for Agricultural Development

Since Romania and Yugoslavia, the only members of the World Bank in Eastern Europe, are classified as developing countries they are eligible for World Bank loans. Romania received three agriculturally-related loans in 1979. The first was a \$70-million loan for irrigation and drainage with the objective of stabilizing yields on 225,000 hectares in the vicinity of the Mostistea and Cazmatui rivers. A second loan of \$80 million was provided for building large-scale hog production facilities, including modern slaughtering and processing plants and for providing various kinds of assistance to small-scale hog producers. Finally, an \$85-million loan was earmarked for intensifying poultry production and processing. In the beginning of 1980, an irrigation project loan of \$85 million was approved for the Covurlui area.

Yugoslavia received two World Bank loans in 1979. One of these was a \$51-million loan for flood control and drainage in the Sava river basin, and the other was an \$86-million general purpose loan to be used for improving animal husbandry, viticulture, and building slaughter houses and tobacco barns. This loan is to be distributed equally between the private and public sectors.

#### U.S. Agricultural Trade With Eastern Europe

U.S. exports of agricultural products to the region reached a record level of \$2.1 billion in 1979, an 80-percent increase over the 1978 export value. Declines in East European grain and rapeseed production and inadequate supply from other world market sources were the primary causes of this upsurge, but higher prices also contributed to the large increase (see table below). Volume and value

Indices of U.S. export volume and value in 1978

	Volume	Value
1978 = 100		
Wheat .....	242	328
Feed grains .....	162	189
Soybeans .....	122	140
Vegetable oil .....	206	295
Soybean meal .....	126	141
Cotton .....	165	176
Cattle hides .....	96	156

increased in every major export category except in the volume of cattle hides. The unit price increases of U.S. exports were the steepest for cattle hides, followed by vegetable oil and wheat (see table below).

**Eastern Europe: Unit prices of U.S. exports  
in selected commodities, 1971-79**

Year	Wheat	Corn	Soy-beans	Soybean meal	Soybean meal/corn
Dollar per ton					
Price ratio					
1971 .....	60	59	114	100	1.69
1972 .....	57	53	123	116	2.19
1973 .....	99	78	204	206	2.64
1974 .....	125	130	235	220	1.69
1975 .....	154	132	257	172	1.30
1976 .....	136	117	203	179	1.53
1977 .....	94	97	266	213	2.20
1978 .....	119	105	245	210	2.00
1979 .....	166	120	282	233	1.94

Source: U.S. Census Bureau.

Agricultural commodities accounted for more than one-half of U.S. exports to Eastern Europe during the 1970's and surpassed 70 percent in 1973, 1976, and 1979 (table 11). In 1979, agriculture's share was over 85 percent of total U.S. exports to Czechoslovakia, the GDR, and Poland. Agriculture's share in U.S. exports to Hungary and Yugoslavia was less than 50 percent.

In 1979, the composition of U.S. agricultural exports followed past patterns. Grain, oilseed, and oilseed products combined continued to account for the bulk (84 percent) of total agricultural exports. Poland was the leading East European market for U.S. agricultural products, accounting for about one-third of the total in 1979; Bulgaria and Hungary were the least significant markets.

For many years, the United States has conducted trade with Poland and Yugoslavia under Most Favored Nation (MFN) treatment. Currently, Hungary and Romania also receive MFN treatment based on special bilateral agreements negotiated under Title IV of the Trade Act of 1974. Furthermore, Romania and Yugoslavia, as designated beneficiary developing nations, are eligible to export selected products to the United States duty-free, under the U.S. generalized system of preferences authority for which is set out in Title V of the Trade Act of 1974. The MFN treatment with Hungary and Romania is renewable annually. At present, Bulgaria, Czechoslovakia, and the GDR are not eligible for MFN treatment.

The value of U.S. agricultural imports declined slightly in 1979 by about \$13 million to \$353 million (table 13). Processed meats (largely canned pork) continued to be the principal import item—accounting for 71 percent of total agricultural imports. The value of meat imports increased from Czechoslovakia, Poland, and Romania, but decreased from Hungary and Yugoslavia. Tobacco and cheese, followed by feathers and down were the other important U.S. imports.

**U.S. Trade Promotion Activities**

The USDA annually receives funds for credit allocation to selected countries through the Commodity Credit Corporation. These limited funds are disbursed to enhance competitiveness with credits granted by other exporting nations. In addition to the long established CCC Export Credit Sales Program, GSM 5, a Non-Commercial (Political) Risk Assurance Program, GSM 101, has also been in effect since 1978. The GSM 5 program finances exports at a fixed interest rate for the duration of the credit repayment period, usually for 3 years. The GSM 101 program is designed to stimulate private financing of U.S. agricultural exports. This program protects the U.S. financing institutions against defaults of repayment caused by non-commercial reasons. This credit guarantee also has a maximum 3 year duration. Until now, only Poland has used the GSM 101 credits. In 1979 and 1980, Poland has been the largest East European user of both GSM 5 and GSM 101 credits. These credits are granted on a fiscal year basis (for detailed use, see table below).

**GSM 5 credit to Eastern Europe**

Country	Commodity	FY 1979	FY 1980
		\$ Million	
Poland .....	Total of which:	385.5	200.0
	Corn	154.1	
	Soybean meal	54.7	
	Cotton	24.0	
	Soybeans	19.6	
	Soybean oil	15.4	
	Rice	10.3	
	Other <sup>1</sup>	30.1	
Romania .....	Total of which:	107.2	25.0
	Corn	107.2	
Hungary .....	Total of which:	15.8	15.0
	Soybean meal	15.8	
Yugoslavia ...	Total of which:	8.0	--
	Soybeans	8.0	

<sup>1</sup> Includes barley, grain sorghum, cottonseed meal, linseed meal, and soy protein.

For FY 1979, Poland received \$100 million; for FY 1980, \$300 million GSM 101 credits—principally for grains, oilseeds, and oilseed products. In FY 1980, Hungary and Romania received GSM 5 credits for protein meal. Bulgaria, Czechoslovakia, and the GDR are not eligible for CCC credits.

USDA export promotion activities also include the establishment of a trade office in Warsaw which will soon be opened. A trade officer is already at the location. His activities will extend

beyond Poland to other East European countries and will involve assistance to U.S. exporters.

The USDA promotes agricultural exports through assisting agricultural "Cooperators" such as the American Soybean Association, U.S. Wheat Associates (formerly Great Plains Wheat and Western Wheat Associates), U.S. Feed Grains Council, and the National Renderers Association. These "Cooperators" have been active in several East European countries, conducting feeding experiments in Poland, and arranging seminars. In 1979, they expanded their activities to the GDR with a well attended livestock feeding seminar. The Holstein Friesian Association began some activities in Romania after successfully

introducing Holstein heifers and bulls in Hungary a few years ago.

#### **U.S. Export Outlook Good for 1980**

U.S. agricultural exports are expected to reach a record high level in FY 1980. Exports in the second half of 1980 and beyond will depend on the 1980 East European harvest. FY 1980 exports are estimated at \$2.3 billion, dominated as in the past by grains, oilseeds, and oilseed products. A slowdown in East European economic growth and persisting hard currency shortages, however, are forcing the importing countries to limit livestock production growth and hold feed imports at an affordable level. (*Thomas A. Vankai*)

### **INVESTMENT AND INPUTS**

Agriculture's share of total investment for 1979 ranged from a low of 8 percent in Yugoslavia to a high of 16.5 percent in Poland. In Poland, the proportion of investment earmarked for agriculture roughly equaled agriculture's share in national product. For Hungary and Czechoslovakia it was slightly less, and for Bulgaria, Romania, and Yugoslavia it was much less.

#### **Farm Machinery**

All countries in Eastern Europe have continued to register increases in available tractor horsepower in the agricultural sector. However, these increases have followed distinctly different lines for the private farms than for the socialized farms.

In the countries of predominately private farming—Yugoslavia and Poland—1979 plans called for markedly higher increases in the number of tractors and available tractor horsepower than did plans for the other countries. This is indicative of the continued relative under-capitalization of the private farming sectors in Yugoslavia and Poland as compared with the socialized farms of Eastern Europe. Only in these two countries did 1979 targets for the addition of tractors greatly exceed replacement requirements.

Poland planned for the production of 60,000 tractors in 1979, 80 percent of which was destined for the private sector. However, only 54,500 units were produced. The shortfall from plan has been attributed to severe weather which disrupted production early in the year.

In 1979, Yugoslavia planned the production of 52,770 tractors for domestic use, and this goal was nearly met. Though production has been concentrated in the small to medium-size categories (75

percent under 45 h.p.), shortages did develop in this range. The problem was most acute in the 36-45 h.p. category with demand estimated at 23,000 units and supply at only 14,000.

For the countries with predominately socialized farming, increases in available tractor horsepower have been lower and additions to stock have roughly equalled replacement rates. These trends represent a replacement of older smaller models with more powerful new ones. In the GDR between 1971-78, for example, the number of tractors in the smallest categories fell from 35,000 to 28,000, while the number in the the largest size category increased from 26,000 to 41,000 units. This trend is also observable in the socialized farming sector of Yugoslavia and to a lesser extent that of Poland.

Planned production targets for tractors in Hungary and Czechoslovakia in 1979 were fairly modest and represented a continued increase in available tractor horsepower of roughly 2.5 to 5 percent. Throughout the year an excess supply of most types of machinery was noted in Hungary. Some exceptions were self-propelled loading machines, caterpillar-type tractors, and harvesting machinery for fruit and vegetables.

For 1979, Bulgaria reported a 1.1-percent increase of tractors in agriculture converted to standard 15 h.p. units. Though such data for Romania are currently unavailable, pressure to export machinery may be eliminating increases in available tractor horsepower for domestic use.

The inadequate availability of spare parts continued to be a serious hindrance to agricultural machinery utilization in 1979 for the entire region. Poland addressed this problem most clearly, noting excessive backlogs in repair shops (due primarily to a shortage of spare parts) for tractors during

spring sowing and for harvest combines just before the grain harvest. Thus far, it appears that no country has been able to successfully coordinate the supply of spare parts to allow for adequate satisfaction of demand for these items.

### Irrigation and Drainage

Irrigation has received varying degrees of attention in the East European countries. To date only Romania, Bulgaria, and GDR have made significant progress in terms of the extent of irrigation (see table below).

Irrigable area, Eastern Europe, 1979

Country	1,000 hectares	Percent of arable land
Bulgaria* . . . . .	1,168	27.1
Czechoslovakia . . . . .	292	5.6
GDR . . . . .	1,000	20.0
Hungary* . . . . .	450	8.3
Poland* . . . . .	508	3.4
Romania . . . . .	2,191	20.8
Yugoslavia . . . . .	150	1.9

\*1978 data.

Romania has experienced rapid growth in irrigation. In 1979, 198,000 hectares were put under irrigation (267,000 hectares planned). Drainage facilities were supplied on 45,000 hectares (233,000 ha. planned). A sizable portion of recent land improvement projects in Romania has been developed with World Bank cooperation.

In Poland, work started on the long-range Vistula River project which should, when completed around the year 2000, make 220,000 hectares of barren land available for agricultural production and improve an additional 3-4 million hectares. Land improvement work elsewhere in Poland is reported to be progressing at the rate of 120,000-150,000 hectares a year. Stress is being placed on drainage systems.

The GDR, like Romania, has experienced rapid growth in irrigable land. Most of this growth has

been accounted for by sprinkler systems imported from the USSR.

Yugoslavia lags noticeably in the area of irrigation. The Pannonian Irrigation System in the country's fertile Vojvodina region, which was originally planned for 450,000 hectares, in 1979 comprised only one-third that area. Expansion has come very slowly. Elsewhere a large scale water management program for the Sava River basin has recently been approved by participating republic and local governments. It is being financed through the help of the World Bank.

### Fertilizer Use in 1979

The 1970's witnessed an increase in fertilizer use (per hectare of arable land) of roughly 38 percent in Eastern Europe (see table below). By 1979, fertilizer use on an arable land basis was at levels in Czechoslovakia, the GDR, Hungary, and Poland comparable with all but the most intensive users in Western Europe.

For 1979, only two countries have indicated significant progress in increasing the amount of fertilizer used. Romania increased use 29 percent to 1.43 million tons (136 kg/hectare of arable land), while Bulgaria raised use nearly 12 percent (192 kg/hectare of arable land). Both of these countries relied primarily on altering their trade patterns (increased import, decreased export) in achieving these results.

Elsewhere in the region developments were less positive. Poland experienced delays in delivery of fertilizer to farmers throughout the year. These delays were thought to have hindered timing of applications for both the spring and fall sowing seasons. The government has indicated that use fell by roughly 1-2 percent in 1979 and in light of production and import figures, stocks at agriculture supply centers were probably run down to keep this decrease from being greater. This situation was exacerbated by a 9-percent decline in supplies of lime from 1978 levels. Because of its generally

Fertilizer use,<sup>1</sup> Eastern Europe 1971-78

Year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Eastern Europe
Kilogram/hectare arable land								
1971 . . . . .	141	254	332	171	172	60	82	153
1972 . . . . .	143	263	334	183	196	61	88	165
1973 . . . . .	141	265	361	216	207	69	87	176
1974 . . . . .	126	275	376	243	228	78	84	186
1975 . . . . .	157	305	370	276	236	88	90	199
1976 . . . . .	152	319	361	254	244	96	92	204
1977 . . . . .	172	311	332	279	239	97	101	204
1978 . . . . .	172	334	331	286	241	105	108	211

<sup>1</sup> Nitrogen, phosphate, and potash in nutrients.

acidic soils, Poland depends on substantial liming to increase nutrient availability.

In both Yugoslavia and Hungary, prices for fertilizer were increased in 1979. In the latter country, these increases were thought to contribute to a situation of over-supply. Due to a tight financial situation which developed on many farms through the summer, purchases of fertilizer didn't reach planned targets and only marginally exceeded the 1978 level.

In Yugoslavia during 1979, production rose 157,000 tons, while net imports fell 129,000 tons (both figures in terms of raw weight), indicating a slight increase in domestic availability.

Eastern Europe is a net exporter of chemical fertilizers, largely on the strength of exports of nitrogen fertilizers. However, all nations in the region are dependent on natural gas imports for the production of ammonia. These imports come almost entirely from the Soviet Union.

In the production of phosphate fertilizers, Eastern Europe is a net importer of phosphate fertilizer, although Romania and Yugoslavia are net exporters. Likewise, all countries with the exception of Yugoslavia are dependent on outside sources for raw materials in phosphate fertilizer production. The Soviet Union is the primary supplier of these raw materials as well as the primary supplier of phosphate fertilizers to the net importing countries.

Potash is produced in abundant quantities in the GDR and to a small extent in the other East European countries with the exception of Bulgaria and Yugoslavia. However, the region as a whole cannot meet its potash demand internally and relies on imports from the USSR.

#### **Prospects for 1980**

The outlook for agricultural investment in Eastern Europe is for slow growth in 1980. There are

two reasons for this: First, there is desire on the part of most East European countries to reduce the share of investment in national income. Second, top priority is being given to fuels and energy, as well as transportation. In Poland for instance, the level of total investment is planned to decrease by 9 percent with agricultural investment falling by 18 percent from 1979 levels. In Hungary and the GDR, investments in agriculture will, at best, maintain the 1979 level. The Czechoslovakian Government has indicated it plans increases in agricultural investment, but with total investment increasing by just 2.4 percent and priority being placed elsewhere, it's doubtful that this increase will amount to much. Though the Yugoslav Government has placed agriculture right behind energy and transportation on its list of priorities for investment, pressure to limit investment spending may affect agriculture. The private agricultural sector, accounting for 85 percent of arable land, has traditionally had difficulty in securing investment funds. However, continued strong growth in mechanization is expected. In Bulgaria and Romania, prospects are good for significant increases in investment in agriculture in 1980.

In 1980, the price of fertilizer will go up in Czechoslovakia and remaining government subsidies for fertilizer in Yugoslavia will be eliminated. Due to the energy intensive nature of fertilizer production and high levels of use already attained in some of the countries, fertilizer use in 1980 is not expected to increase significantly.

To heighten efficiency in use, most countries have expressed an interest in increasing the share of compound fertilizer, and Czechoslovakian authorities have mentioned a movement toward liquid fertilizers. In addition, Czechoslovakia and Romania are stressing more efficient utilization of farmyard manure. (*Edward Cook*)

## **POLICY CHANGES IN 1979, OUTLOOK FOR 1980**

### **Management Decentralization In Bulgaria and Romania**

In Bulgaria and Romania, programs of management decentralization in agriculture began in 1978 and were completed in 1979. In Bulgaria, the Ministry of Agriculture was abolished and replaced by a National Agro-Industrial Union (NAIU) which will handle all questions of state policy involving agricultural enterprises. Compared with the old ministry, management will be more decentralized. The NAIU is organized into 28 self-sufficient District Agro-Industrial Unions (DAIU).

Each DAIU has jurisdiction over several agro-industrial and industrial-agricultural complexes which incorporate collective and state farms, the feed industry, the agricultural machine industry, agricultural research institutes, and agricultural service industries.

The principal reason for the reorganization was to transfer financial responsibilities for management from the state to the districts, and within the districts to the individual complexes. The managers of the DAIU are entrusted with a wide range of decisionmaking, but they are

expected to meet a production quota for meat, milk, eggs, fish, vegetables, and fruits. The State may grant exemptions if it is impossible to produce a mandatory commodity in a certain district. The financial independence of DAIU means that wages and salaries depend on the enterprise income. Direct contracting between economic units will be permitted under a system of maximum and minimum prices. Natural disaster is covered through insurance. Imports going to an agricultural enterprise will depend on that enterprise's export earnings. State loans can be obtained for investments if it can be justified that these investments will increase productivity.

In a less drastic manner, Romania also shifted decisionmaking and financial responsibility to local administrators. A national Agro-Industrial Council composed of representatives of state farms and cooperatives was established and charged with managerial coordination. The Council's primary task is to assure efficient use of land, labor, and machinery and to promote production specialization. An amalgamation of the agricultural production enterprises and related processing industry is also planned with a design to eliminate basic differences in living conditions originating from agricultural and industrial activities.

#### **Slight Shift in Land Utilization**

In 1978, 55 percent of arable land was sown to grain, 7 percent to potatoes, 4 percent to oilseeds, 3 percent to sugarbeets. In 1979, grain area and sugarbeet area declined somewhat. The pattern of land utilization in Eastern Europe has not changed significantly during the decade, and annual area fluctuations in certain crops were primarily weather related. Soybeans are one exception, since the area of this crop more than doubled during the 1970's (table 3).

The grain area in Poland remained at the 1975 level despite a planned 6-percent increase during 1976-80. Raising grain area by 500,000 hectares, and sugarbeet and rapeseed area to a lesser extent, remains a government policy. Uncultivated land or land designated for potatoes or forages could be diverted to growing grains, sugarbeets, or rapeseed. In Romania, an expansion of arable land is planned with the help of irrigating and improving presently unused land. However, all countries face some annual loss of agricultural area to new roads and other construction.

#### **Private Farming Is Stimulated**

In Poland, where private farming dominates the agricultural structure, limitations on the size of holdings are no longer strictly enforced. Farmers who voluntarily cooperate in specialized crop or livestock production receive favored treatment in

allocation of loans, feed, fertilizer, and construction material. Bulgaria, Hungary, Yugoslavia, and most recently the GDR, encouraged small scale, private farming activities. A popular method of helping the private entrepreneur is to supply animals to individuals on contract by the large socialized farms. The individuals in turn breed and feed the animals and sell the finished products to the contractor.

#### **Producer and Consumer Prices Increased Selectively**

The steady increase of raw material prices on the international market since 1973 forced some East European countries to abandon their stable food price policy. Producer prices of agricultural commodities had to be raised to cover the increased cost of production. The higher prices reduced the gap between producer and consumer prices which has resulted in annually increasing state subsidies. The Polish food subsidies in 1979 accounted for one-fourth of the total budget outlay, and food subsidies were similarly out of proportion in other countries. The northern countries chose to hold the line on bread, meat, and sugar prices, fearing adverse consumer reaction. Price increases in Poland were disguised by opening "commercial shops" where quality meats and meat products were sold for much higher prices than in regular stores. The GDR introduced slight quality changes in certain products to justify price increases. Intermittent shortages also acted as a means of rationing low priced products.

Czechoslovakia increased the prices paid by farmers to the state for mixed feed and fertilizer. Producer prices were also raised to compensate the farmers for the increased cost of production. The new, higher prices for slaughter cattle and sheep compensated completely for the increased costs, while the new hog and poultry prices compensated only partially. This deliberate policy is designed to induce farmers to shift to feeding ruminant animals and to use less concentrated feed. The new meat prices became effective in January 1980, but only for enterprises that fulfilled their 1979 delivery contracts.

Poland raised prices for sugarbeets and rapeseed, hiked slaughter sheep prices by 25 percent, and increased milk prices by 15 percent. The Polish Government has also elected to pay bonuses to farmers who provide meat to the state from feed grown on their farms. This measure should encourage self-reliance and relieve pressure on central mixed feed stock in short supply during the 1979/80 marketing year.

While prices of industrial consumer goods were raised selectively in all countries, the southern countries also announced official increases for food

prices as well. Hungary increased food prices in July 1979 by an average 20 percent. Meat prices were raised by 30 percent and bread prices by 50 percent. Average consumer price increases on an annual basis were up 9 percent in 1979 since prices were stable until July.

In Romania, the general retail price level was up about 5-6 percent but prices of canned vegetables, canned fruit, and fish were increased by one-third.

In Bulgaria, at the end of November, meat and egg prices were raised by 30 percent, processed meat prices by 40 percent, and alcoholic beverages by 45 percent. Milk, cheese, rice, and flour prices were up similarly, and the price of butter doubled. In Bulgaria, these increases were the first for bread since 1956 and the first for meat, milk, and sugar since 1968. Despite a temporary price freeze between August 8 and September 30, Yugoslavia had a 24-percent increase in retail prices in 1979.

#### **Negotiations Between CEMA And EC Progress Slowly**

CEMA made little headway in negotiating with EC for recognition as a uniform trading block and for obtaining preferential trading status. The November 1979 meeting in Moscow, the first in a year, resulted in further clarification of views, but major differences were not resolved. No agreement has been reached on the elimination of trade barriers. Accords were reached in relation to information exchanges, standardization problems, environmental policies, and economic forecasting. In 1980, a working group will codify the points of agreement.

#### **CEMA Members Cooperate In Long Range Programs**

A permanent Commission on Agriculture of the CEMA members periodically reviews progress in existing programs and discusses new areas of interest for joint action. The Commission decided in 1979 to approve a program to create a genetic bank of large meat cattle, improve sheep breeding, and establish a poultry breeding center. To help overcome the acute shortage of protein feed, the members will collaborate in the construction of a fodder yeast plant in the USSR with an annual capacity of 300,000 tons. The development of a standardized animal husbandry technology was initiated with scheduled completion of the program for cattle and hogs by 1980 or 1981; for sheep and poultry by 1982 or 1983.

#### **Outlook for 1980**

A high rate of increase—ranging from 5 to 9.4 percent—in agricultural output is targeted for the countries where production stagnated or declined in 1979—Czechoslovakia, Hungary, and Poland. Per capita real income targets are at a modest 1-2 percent in Hungary and Poland. Investment outlays are scheduled to decline in Hungary and Poland and no growth in investments is planned in the GDR. It is not expected that agriculture's share in total investment will increase in any country.

In all countries, the output of crops is slated to grow faster than livestock production in order to narrow the gap between feed requirement and domestic feed supply. For example, the crop production growth rate target in Czechoslovakia is 17 percent and in Poland 10.7 percent, while livestock production growth plans call for 0.5 and 0.3 percent, respectively.

It is generally expected that production in the socialized sector will grow faster than in the private sector. In Yugoslavia, for example, the plan calls for an 8-percent increase in the socialized sector, and 3 percent in the private sector.

The planned growth rate in agriculture is based to a large extent on growth of labor productivity and mobilization of reserve capacities, such as improving feeding efficiency, better utilization of byproducts, stronger incentives to private producers, and on better organization and management.

The large dependence on increasing productivity and capturing latent reserves points to the difficulty of achieving these ends. Mention of these shortcomings occurs annually, but changing traditional agricultural practices is a gradual, long term process. At a time when a faster growth of investment is needed than in the past for obtaining an additional unit of production, the investments will be retrenched instead. In the absence of the discovery of new higher yielding crop varieties and with no significant increase in investments and inputs, the weather during each crop's vegetative period will be the main determinant for the 1980 harvest results. Livestock production, on the other hand, will depend on domestic crop production, since it is unlikely that the East European countries can afford to increase feed imports. (Thomas A. Vankai)

Table 1-Area of grains, Eastern Europe, annual 1971-79 1/

Commodity and year	Bulgaria 2/	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
<u>1,000 hectares</u>								
Wheat:								
1971	1,013	1,103	633	1,273	2,060	2,501	1,929	10,512
1972	961	1,197	690	1,317	2,048	2,523	1,924	10,660
1973	934	1,235	696	1,294	1,962	2,358	1,697	10,176
1974	904	1,276	728	1,324	2,022	2,389	1,842	10,485
1975	912	1,183	688	1,251	1,842	2,345	1,615	9,836
1976	918	1,278	762	1,325	1,832	2,388	1,723	10,226
1977	910	1,287	732	1,311	1,834	2,269	1,604	9,947
1978	935	1,274	686	1,324	1,852	2,284	1,712	10,067
1979	900	1,100	720	1,138	1,549	2,087	1,524	9,018
Rye:								
1971	19	234	668	127	3,711	48	110	4,917
1972	17	232	646	119	3,543	42	104	4,703
1973	16	225	646	107	3,416	34	96	4,540
1974	15	219	637	106	3,138	(40)	91	4,246
1975	17	191	593	104	2,792	(40)	84	3,821
1976	13	186	600	93	2,934	(40)	76	3,941
1977	13	212	619	91	3,116	(40)	69	4,160
1978	13	187	652	78	3,030	(40)	63	4,063
1979	13	200	660	69	2,868	35	59	3,904
Barley:								
1971	434	851	656	298	899	330	280	3,748
1972	446	854	618	291	1,016	327	290	3,842
1973	458	873	692	287	1,083	315	328	4,036
1974	477	867	779	271	1,230	402	330	4,356
1975	575	980	929	257	1,335	442	360	4,878
1976	524	857	960	228	1,210	410	293	4,482
1977	529	856	997	224	1,235	595	306	4,742
1978	473	919	1,035	225	1,202	722	273	4,849
1979	530	980	1,000	263	1,470	772	291	5,306
Oats:								
1971	75	344	230	45	1,330	128	265	2,407
1972	65	323	247	48	1,359	121	256	2,419
1973	46	278	238	37	1,271	105	251	2,226
1974	47	226	222	33	1,182	85	249	2,044
1975	50	221	243	45	1,291	70	270	2,190
1976	44	198	190	39	1,115	45	232	1,863
1977	57	174	153	32	1,097	54	231	1,798
1978	51	151	153	27	1,030	48	210	1,670
1979	45	150	150	45	1,094	40	209	1,733

--Continued

Table 1--Area of grains, Eastern Europe, annual 1971-79 1/

Commodity and year	Czechoslovakia	Bulgaria	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
<u>1,000 hectares</u>								
Corn:								
1971	655	142	3	1,321	5	3,131	2,422	7,679
1972	689	148	9	1,392	6	3,196	2,383	7,823
1973	627	169	4	1,461	4	2,957	2,377	7,599
1974	523	167	1	1,461	5	2,963	2,256	7,376
1975	652	158	--	1,413	15	3,305	2,363	7,906
1976	731	204	--	1,339	52	3,378	2,374	8,078
1977	702	203	--	1,281	57	3,318	2,321	7,882
1978	601	202	--	1,283	33	3,179	2,130	7,428
1979	700	220	--	1,372	46	3,410	2,238	7,986
Rice:								
1971	17	--	--	26	--	28	8	79
1972	15	--	--	28	--	27	7	77
1973	16	--	--	27	--	23	7	73
1974	17	--	--	28	--	23	7	75
1975	17	--	--	27	--	22	8	74
1976	17	--	--	28	--	21	8	74
1977	17	--	--	28	--	20	8	73
1978	17	--	--	24	--	22	8	71
1979	16	--	--	22	--	22	8	68
Other coarse grains <u>3/</u>								
1971	1	--	132	--	447	2	18	600
1972	1	--	120	--	513	2	14	650
1973	1	1	101	--	514	3	15	635
1974	--	--	76	12	531	1	10	630
1975	--	--	58	8	589	15	9	679
1976	--	--	29	5	625	68	7	734
1977	--	--	19	3	663	12	6	703
1978	--	--	17	2	705	23	6	753
1979	--	--	20	--	845	--	--	865
Total grain:								
1971	2,214	2,674	2,322	3,090	8,452	6,168	5,032	29,952
1972	2,194	2,754	2,330	3,195	8,485	6,238	4,978	30,174
1973	2,097	2,781	2,377	3,213	8,250	5,793	4,771	29,282
1974	1,983	2,755	2,444	3,235	8,108	5,901	4,785	29,211
1975	2,222	2,733	2,513	3,105	7,864	6,239	4,709	29,385
1976	2,247	2,723	2,541	3,057	7,768	6,350	4,713	29,399
1977	2,228	2,732	2,520	2,970	8,002	6,308	4,545	29,305
1978	2,090	2,733	2,544	2,963	7,852	6,318	4,402	28,902
1979	2,204	2,650	2,550	2,909	7,872	6,366	4,329	28,880

-- = No information reported, negligible, or none.

( ) = Estimates

1 / 1979 data are preliminary.

2/ Area of wheat from 1974 to 1978 has been revised.

3/ Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 2--Production of grains, Eastern Europe, annual 1971- 79 1/

Commodity : and year	Bulgaria: 2/	Czecho- slovakia:	GDR	Hungary:	Poland	Romania	Yugo- slavia	Total Eastern Europe
:								
<u>1,000 metric tons</u>								
:								
Wheat:								
1971	3,095	3,878	2,490	3,915	5,456	5,595	5,604	30,033
1972	3,582	4,017	2,744	4,089	5,174	6,041	4,843	30,490
1973	3,258	4,646	2,861	4,498	5,807	5,487	4,750	31,307
1974	3,034	5,059	3,154	4,968	6,409	4,999	6,282	33,905
1975	2,996	4,202	2,736	4,005	5,207	4,860	4,404	28,410
1976	3,511	4,807	2,715	5,148	5,745	6,723	5,979	34,628
1977	3,384	5,214	2,914	5,315	5,308	6,463	5,595	34,193
1978	3,466	5,601	3,147	5,673	6,029	6,250	5,355	35,521
1979	3,324	3,742	3,000	3,700	4,187	4,677	4,512	27,142
Rye:								
1971	24	619	1,754	180	7,827	65	134	10,603
1972	21	634	1,904	171	8,149	58	120	11,057
1973	19	690	1,699	175	8,268	42	118	11,011
1974	21	671	1,949	175	7,881	50	120	10,867
1975	18	530	1,563	147	6,270	52	98	8,678
1976	15	561	1,455	156	6,922	49	105	9,263
1977	15	641	1,644	142	6,250	50	87	8,829
1978	19	630	1,895	137	7,434	50	81	10,246
1979	25	482	1,760	100	5,201	47	81	7,696
Barley:								
1971	1,253	2,851	2,286	782	2,450	789	464	10,875
1972	1,427	2,651	2,592	802	2,750	838	487	11,547
1973	1,368	2,962	2,848	871	3,158	730	676	12,613
1974	1,636	3,375	3,422	894	3,908	916	794	14,945
1975	1,699	3,114	3,682	699	3,638	952	703	14,487
1976	1,781	2,901	3,456	747	3,617	1,231	653	14,386
1977	1,481	3,207	3,681	706	3,396	1,859	650	14,980
1978	1,488	3,642	4,135	760	3,636	2,307	560	16,528
1979	1,512	3,606	3,800	700	3,731	2,037	631	16,017
Oats:								
1971	102	902	807	85	3,195	161	312	5,564
1972	75	726	890	60	3,212	111	260	5,334
1973	51	740	805	67	3,220	102	298	5,283
1974	67	687	922	78	3,244	91	353	5,442
1975	56	591	780	87	2,920	57	368	4,859
1976	65	379	506	86	2,695	55	320	4,106
1977	88	454	411	64	2,552	61	309	3,939
1978	76	456	595	77	2,492	57	284	4,037
1979	60	409	400	90	2,186	59	283	3,487

--Continued

Table 2--Production of grains, Eastern Europe, annual 1971-79 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
<u>1,000 metric tons</u>								
Corn:								
1971	2,518	524	9	4,674	13	7,850	7,443	23,031
1972	2,974	642	27	5,537	10	9,817	7,930	26,937
1973	2,586	619	13	5,911	13	7,397	8,253	24,792
1974	1,627	574	3	6,195	19	7,440	8,031	23,889
1975	2,822	843	2	7,088	79	9,241	9,389	29,464
1976	3,731	514	---	5,148	231	11,583	9,106	29,613
1977	2,513	792	---	5,939	232	10,114	9,870	29,462
1978	2,236	619	---	6,581	120	10,208	7,585	27,349
1979	3,205	989	---	7,400	181	12,380	10,063	34,218
Rice:								
1971	67	---	---	67	---	66	36	236
1972	47	---	---	61	---	45	31	184
1973	62	---	---	69	---	50	32	213
1974	58	---	---	56	---	53	31	198
1975	68	---	---	69	---	68	37	242
1976	41	---	---	32	---	37	23	133
1977	68	---	---	35	---	47	36	186
1978	61	---	---	23	---	58	34	176
1979	58	---	---	40	---	61	45	204
Other coarse grains 3/:								
1971	1	---	934	---	929	2	18	1,344
1972	1	---	379	---	1,140	3	15	1,538
1973	---	---	276	---	1,392	3	15	1,686
1974	---	---	254	24	1,516	2	13	1,809
1975	---	---	148	13	1,443	36	11	1,651
1976	---	---	58	9	1,653	112	9	1,841
1977	---	---	43	5	1,661	20	7	1,736
1978	---	---	47	4	1,826	44	6	1,927
1979	---	---	40	---	1,855	---	---	1,895
Total grain:								
1971	7,060	8,774	7,740	9,703	19,870	14,528	14,011	81,686
1972	8,127	8,670	8,536	10,720	20,435	16,913	13,686	87,087
1973	7,344	9,657	8,503	11,591	21,858	13,811	14,142	86,906
1974	6,445	10,366	9,703	12,390	22,977	13,551	15,624	91,056
1975	7,656	9,280	8,910	12,108	15,557	15,266	15,010	87,787
1976	8,444	9,162	8,190	11,321	20,863	19,790	16,195	93,965
1977	7,549	10,308	8,695	12,206	19,399	18,614	16,554	93,325
1978	7,420	10,948	9,821	13,255	21,537	18,974	13,905	95,860
1979	8,184	9,228	9,000	12,030	17,341	19,261	15,615	90,659

--- = No information reported, negligible, or none.

1/ 1979 data are preliminary.

2/ Production of wheat from 1974 to 1978 has been revised.

3/ Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 3--Area of selected crops, Eastern Europe, annual 1971-79 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
<u>1,000 hectares</u>								
<b>Potatoes:</b>								
1971	29	332	658	129	2,669	290	326	4,433
1972	30	322	646	118	2,656	296	315	4,383
1973	27	305	650	106	2,678	284	317	4,367
1974	31	280	635	108	2,684	295	321	4,354
1975	30	251	574	100	2,581	289	314	4,139
1976	29	240	599	90	2,466	289	308	4,021
1977	34	237	587	99	2,437	295	315	4,004
1978	37	221	579	94	2,360	293	298	3,882
1979	39	216	570	79	2,441	293	296	3,934
1980	..	..	..	..	..	..	..	..
<b>Sugarbeets:</b>								
1971	44	185	211	73	421	178	85	1,197
1972	55	187	222	79	438	197	79	1,257
1973	60	197	229	92	445	234	86	1,343
1974	61	205	234	98	440	218	104	1,360
1975	78	217	266	127	496	247	108	1,539
1976	73	214	267	129	555	236	107	1,581
1977	73	216	269	122	532	255	122	1,589
1978	63	218	261	123	523	249	126	1,563
1979	73	219	255	112	455	259	140	1,513
1980	..	..	..	..	..	..	..	..
<b>Sunflowerseed:</b>								
1971	267	3	--	118	--	548	183	1,119
1972	274	4	--	108	--	554	171	1,111
1973	252	4	--	103	--	512	224	1,095
1974	262	3	--	113	--	509	201	1,088
1975	238	4	--	129	--	511	194	1,076
1976	226	6	--	135	--	521	175	1,063
1977	237	9	--	138	--	513	209	1,106
1978	226	11	--	151	--	512	249	1,149
1979	230	21	--	230	--	520	256	1,257
1980	..	..	..	..	..	..	..	..
<b>Rapeseed:</b>								
1971	--	52	104	44	362	--	9	571
1972	--	53	111	50	276	--	9	499
1973	--	57	122	50	315	--	5	549
1974	--	45	123	33	258	13	5	477
1975	--	63	132	46	309	13	7	570
1976	--	63	130	52	398	7	11	661
1977	--	73	125	60	400	4	20	682
1978	--	79	124	70	337	8	35	653
1979	--	55	116	50	180	4	41	446
1980	..	..	..	..	..	..	..	..
<b>Soybeans:</b>								
1971	18	--	--	--	--	147	5	170
1972	14	--	--	--	--	109	4	127
1973	19	2	--	--	--	183	9	213
1974	25	4	--	15	--	238	9	291
1975	36	4	--	25	--	121	15	201
1976	56	5	--	39	--	155	31	286
1977	69	3	--	29	--	171	32	304
1978	99	3	--	(25)	--	202	34	363
1979	100	3	--	25	--	270	27	425
1980	..	..	..	..	..	..	..	..

Table 3--Area of selected crops, Eastern Europe, annual 1971-79 1/

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<u>1,000 hectares</u>								
Tobacco:								
1971								
1971	115	4	3	14	42	33	49	260
1972	122	4	3	15	46	39	57	286
1973	119	4	3	17	48	52	57	300
1974	123	4	3	17	52	53	57	309
1975	127	4	3	16	50	57	63	320
1976	121	4	3	15	60	53	70	326
1977	122	4	3	16	55	51	65	316
1978	115	4	3	18	44	50	61	295
1979	124	3	3	18	43	50	63	304
1980								
Corn silage:								
1971	214	313	334	270	177	237	36	1,581
1972	244	373	353	239	220	243	35	1,707
1973	312	384	321	250	277	415	36	1,995
1974	387	435	328	237	384	359	36	2,166
1975	187	439	350	256	438	203	36	1,909
1976	210	450	354	331	538	177	36	2,096
1977	230	442	404	325	579	288	39	2,307
1978	310	448	355	298	660	185	43	2,299
1979								
1980								
Hay:								
1971	401	1,220	543	657	1,614	1,173	2/615	6,223
1972	392	1,097	529	698	1,532	1,196	2/644	6,088
1973	410	1,062	527	696	1,624	1,255	2/677	6,251
1974	425	1,015	486	676	1,655	1,163	2/672	6,092
1975	463	972	473	648	1,813	1,147	2/672	6,188
1976	452	944	464	661	1,735	1,052	2/659	5,967
1977	437	945	509	669	1,588	980	2/659	5,787
1978	452	923	536	661	1,683	1,026	2/657	5,938
1979								
1980								
Feed roots:								
1971	20	57	181	34	249	26	35	602
1972	20	53	183	32	236	53	35	612
1973	17	44	155	26	249	69	36	596
1974	16	39	140	25	256	80	36	592
1975	16	30	116	22	252	77	37	550
1976	16	25	55	21	256	87	35	495
1977	15	21	77	22	242	90	35	502
1978	16	18	63	20	257	88	35	497
1979								
1980								

-- = No information reported, negligible, or none.

( ) = Estimates.

1/ 1979 data are preliminary.

2/ Includes only lucerne, clover and vetch.

Table 4--Production of selected crops, Eastern Europe, annual 1971-79 1/

Commodity and year	:	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	:	Total Eastern Europe
1,000 metric tons										
Potatoes:										
1971	:	404	4,621	9,411	1,488	39,801	3,783	2,952		62,460
1972	:	382	5,058	12,140	1,310	48,735	3,672	2,406		73,703
1973	:	328	5,087	11,401	1,163	51,928	2,644	2,974		75,525
1974	:	345	4,522	13,404	1,364	48,519	4,119	3,127		75,400
1975	:	318	3,565	7,673	1,268	46,429	2,716	2,394		64,363
1976	:	351	4,214	6,816	1,087	49,951	4,788	2,828		70,035
1977	:	383	3,760	10,313	1,335	41,148	4,207	3,034		64,180
1978	:	391	3,995	10,777	1,515	46,648	4,465	2,501		70,292
1979	:	435	3,743	12,540	1,200	49,582	4,566	2,691		74,757
1980	:									
Sugarbeets:										
1971	:	1,516	5,832	5,128	2,023	12,557	3,975	2,961		33,992
1972	:	1,951	6,884	7,223	2,908	14,341	5,581	3,274		42,162
1973	:	1,719	6,163	6,682	2,752	13,664	4,380	3,338		38,698
1974	:	1,611	8,219	6,959	3,707	12,971	4,947	4,300		42,714
1975	:	1,758	7,734	6,414	4,089	15,707	4,905	4,213		44,820
1976	:	2,327	5,248	5,106	3,942	15,107	6,911	4,711		43,352
1977	:	1,751	8,229	8,578	3,889	15,640	6,246	5,287		49,620
1978	:	1,600	7,282	7,568	4,192	15,707	5,845	5,157		47,351
1979	:	2,017	7,617	6,630	3,900	14,200	6,008	5,949		46,321
1980	:									
Sunflowerseed:										
1971	:	462	5	--	149	--	791	347		1,754
1972	:	494	6	--	132	--	850	277		1,759
1973	:	448	7	--	152	--	756	434		1,797
1974	:	368	3	--	120	--	681	298		1,470
1975	:	426	5	--	154	--	728	272		1,585
1976	:	362	7	--	185	--	799	319		1,672
1977	:	423	11	--	212	--	807	479		1,932
1978	:	369	15	--	223	--	816	539		1,962
1979	:	415	26	--	415	--	889	525		2,270
1980	:									
Rapeseed:										
1971	:	--	101	197	71	595	--	18		982
1972	:	--	107	234	52	430	--	14		837
1973	:	--	117	246	68	512	--	8		951
1974	:	--	94	298	45	523	16	12		988
1975	:	--	131	363	65	726	17	14		1,316
1976	:	--	134	320	66	980	18	24		1,542
1977	:	--	162	308	89	708	6	40		1,313
1978	:	--	166	318	107	691	11	73		1,366
1979	:	--	81	200	65	233	10	93		682
1980	:									
Soybeans:										
1971	:	2/12	--	--	--	--	165	4		181
1972	:	2/12	--	--	--	--	186	6		204
1973	:	2/30	1	--	--	--	244	13		288
1974	:	33	6	--	14	--	298	14		365
1975	:	80	7	--	41	--	213	30		371
1976	:	99	4	--	42	--	213	48		406
1977	:	90	7	--	41	--	191	67		396
1978	:	120	5	--	(40)	--	230	63		458
1979	:	152	6	--	40	--	376	45		619
1980	:									

--Continued

Table 4--Production of selected crops, Eastern Europe, annual 1971-79 1/

Commodity and year	:	Czecho- Bulgaria :slovakia:		GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe		
:											
1,000 metric tons											
:											
<b>Tobacco:</b>											
1971	:	120	6	6	16	70	30	44	292		
1972	:	158	4	4	17	75	38	62	258		
1973	:	142	5	5	20	78	38	65	353		
1974	:	145	6	6	17	65	39	59	337		
1975	:	162	6	5	17	102	40	70	402		
1976	:	165	5	5	19	125	64	80	463		
1977	:	118	5	5	24	87	47	69	355		
1978	:	139	5	5	22	62	41	62	336		
1979	:	162	5	5	22	70	40	65	369		
1980	:										
:											
<b>Corn silage:</b>											
1971	:	3,753	7,134	7,750	4,246	5,665	4,467	869	33,884		
1972	:	4,114	12,498	14,641	4,998	9,820	5,523	1,030	52,624		
1973	:	4,627	10,474	10,712	4,882	11,940	5,496	961	49,092		
1974	:	3,885	12,823	11,802	4,689	14,824	5,722	1,022	54,767		
1975	:	3,980	14,849	9,600	5,503	17,320	4,729	1,006	56,987		
1976	:	4,755	12,443	6,599	5,638	19,723	4,655	1,103	54,916		
1977	:	4,251	16,138	14,734	5,703	22,775	4,542	1,178	69,321		
1978	:	5,067	14,302	8,342	6,344	21,376	4,038	1,184	60,653		
1979	:										
1980	:										
:											
<b>Hay:</b>											
1971	:	1,613	6,280	3,345	2,345	8,233	4,893	3/2,945	29,654		
1972	:	1,488	6,278	4,086	2,774	8,691	5,172	3/3,094	31,583		
1973	:	1,824	5,854	3,884	2,796	9,295	5,428	3/3,424	32,505		
1974	:	1,547	6,247	4,181	2,984	9,290	5,347	3/3,468	33,064		
1975	:	1,981	6,098	3,707	3,121	8,484	6,206	3/3,561	33,158		
1976	:	2,032	5,067	3,066	2,470	8,469	5,465	3/3,508	30,077		
1977	:	2,027	6,370	4,978	2,894	8,370	5,743	3/3,485	33,867		
1978	:	1,960	5,778	4,735	3,068	8,563	6,105	3/3,280	33,489		
1979	:										
1980	:										
:											
<b>Feed roots:</b>											
1971	:	929	2,249	6,739	1,116	6,847	860	670	19,410		
1972	:	1,047	2,608	9,362	1,281	7,967	2,230	688	25,183		
1973	:	715	1,857	6,858	946	8,534	1,990	722	21,622		
1974	:	661	1,975	6,303	1,045	8,016	2,899	723	21,622		
1975	:	722	1,545	3,415	842	7,773	2,321	722	17,340		
1976	:	886	961	1,872	723	8,378	4,115	740	17,675		
1977	:	600	1,090	3,670	718	8,530	3,740	811	19,159		
1978	:	738	774	2,732	668	9,820	3,826	687	19,245		
1979	:										
1980	:										
:											

-- = No information reported, negligible, or none.

( ) = Estimates.

1/ 1979 data are preliminary.

2/ Derived figure.

3/ Includes only lucerne, clover and vetch.



Table 5--Grain trade,

Commodity and country	Imports								
	1971	1972	1973	1974	1975	1976	1977	1978	1979
	<u>1,000 metric tons</u>								
<b>Total grains:</b>									
Bulgaria	193	1	140	643	650	438	180	427	
Czechoslovakia	2,226	1,718	1,737	1,171	970	2,187	1,207	936	
GDR	2,815	3,820	3,074	2,821	3,422	5,067	2,772	3,301	
Hungary	832	800	282	408	189	233	314	428	
Poland	3,023	3,194	3,317	4,155	4,025	6,131	5,754	7,363	
Romania	427	241	349	1,210	1,230	1,606	1,800	1,101	
Yugoslavia	1,032	990	283	986	22	881	566	131	
Total	10,548	10,764	9,182	11,394	10,517	16,543	12,593	13,687	
<b>Wheat:</b>									
Bulgaria	150	--	--	77	105	32	119	59	
Czechoslovakia	1,318	1,193	1,066	671	525	689	374	257	
GDR	1,867	2,040	1,594	1,219	1,130	1,691	1,100	687	
Hungary	401	35	--	2	30	33	4	--	
Poland	1,910	1,274	1,620	1,758	1,477	2,311	2,599	2,311	
Romania	334	29	184	302	402	925	1,000	300	
Yugoslavia	547	448	225	845	--	862	519	3	
Total	6,527	5,019	4,689	4,874	3,669	6,543	5,715	3,617	
<b>Barley:</b>									
Bulgaria	8	--	53	201	278	--	--	--	
Czechoslovakia	133	112	132	90	82	158	272	20	
GDR	187	675	298	104	390	796	581	806	
Hungary	209	548	199	333	101	153	31	95	
Poland	616	1,332	780	1,135	1,376	742	1,268	2,413	
Romania	32	--	7	216	53	20	23	150	
Yugoslavia	125	66	10	5	15	--	10	11	
Total	1,310	2,733	1,479	2,084	2,295	1,869	2,185	3,495	
<b>Corn:</b>									
Bulgaria	33	--	68	359	222	375	61	360	
Czechoslovakia	480	302	469	332	283	1,260	471	590	
GDR	656	1,031	1,086	1,328	1,795	2,346	940	1,229	
Hungary	162	107	2	6	2	20	248	284	
Poland	267	337	684	765	634	2,035	1,401	1,807	
Romania	--	183	77	652	595	102	300	228	
Yugoslavia	308	417	42	81	--	--	--	106	
Total	1,906	2,377	2,428	3,523	3,531	6,138	3,421	4,604	
<b>Other coarse grains:</b>									
Bulgaria	--	--	15	--	49	24	3	--	
Czechoslovakia	215	41	--	4	9	--	4	--	
GDR	61	30	45	119	69	192	106	536	
Hungary	42	100	67	55	42	14	--	20	
Poland	156	181	179	434	464	924	43	753	
Romania	--	--	11	--	118	501	427	373	
Yugoslavia	26	51	1	9	2	11	36	3	
Total	500	403	318	621	753	1,666	619	1,685	
<b>Rice:</b>									
Bulgaria	2	1	4	6	5	7	9	8	
Czechoslovakia	80	70	70	74	71	80	84	69	
GDR	44	44	51	51	38	42	45	43	
Hungary	18	10	14	12	14	13	27	29	
Poland	74	70	54	63	74	19	57	79	
Romania	61	29	70	40	62	58	50	50	
Yugoslavia	26	8	5	46	5	10	32	8	
Total	305	232	268	292	269	229	304	286	

Footnotes and sources at end of table 6



Table 6--Trade in selected agricultural

Commodity and country	Imports											
	1971		1972		1973		1974		1975		1976	
	:	:	:	:	:	:	:	:	:	:	:	
<u>1,000 metric tons</u>												
Oilseeds:												
Bulgaria	6	5	2	5	3	4	3	1				
Czechoslovakia	132	120	140	129	114	139	135	134				
GDR	208	197	133	129	124	50	61	101				
Hungary	64	6	5	5	2	5	6	1				
Poland	88	108	163	206	134	90	22	141				
Romania	20	19	20	20	20	220	116	284				
Yugoslavia	51	9	12	46	12	27	90	239				
Total	569	464	475	540	409	535	433	901				
Vegetable oil, edible:												
Bulgaria	1	--	--	--	2	2	--	--				
Czechoslovakia	55	58	40	46	49	53	44	50				
GDR	99	161	98	127	97	104	111	127				
Hungary	30	7	21	20	17	17	15	14				
Poland	65	69	66	68	61	87	79	57				
Romania	1	1	1	5	7	10	6	3				
Yugoslavia	134	128	48	59	130	106	51	10				
Total	385	424	274	325	363	379	306	261				
Oilseed meal:												
Bulgaria	137	179	170	302	218	256	214	181				
Czechoslovakia	351	498	604	564	616	671	592	606				
GDR	637	834	769	829	875	875	998	941				
Hungary	368	377	376	577	505	541	594	692				
Poland	317	545	719	794	948	1,024	1,051	1,088				
Romania	51	117	215	227	273	320	230	280				
Yugoslavia	188	150	200	272	150	247	211	162				
Total	2,049	2,700	3,053	3,565	3,585	3,934	3,890	3,950				
Cotton:												
Bulgaria	62	56	61	58	51	48	61	55				
Czechoslovakia	106	108	104	119	116	95	117	96				
GDR	91	91	86	99	100	79	102	86				
Hungary	66	72	73	74	93	87	68	99				
Poland	145	157	145	152	160	145	176	159				
Romania	91	97	108	104	111	108	101	119				
Yugoslavia	79	86	94	109	85	103	103	123				
Total	640	667	671	715	716	665	728	737				
Hides, cattle 1/:												
Bulgaria	486	384	366	443	377	393	198	200				
Czechoslovakia	2,443	2,451	2,452	2,122	2,147	2,208	2,288	2,400				
GDR 2/	805	835	1,160	695	710	760	865	750				
Hungary	1,063	1,476	1,716	1,852	1,648	1,601	2,132	1,750				
Poland 2/	2,265	2,665	3,050	2,575	2,350	1,735	2,270	2,200				
Romania	1,675	2,335	3,244	1,769	1,761	1,899	1,820	2,000				
Yugoslavia 2/	1,020	1,165	1,000	1,150	1,095	1,300	1,905	1,050				
Total	9,757	11,311	12,988	10,606	10,088	9,896	11,478	10,350				

Footnotes and sources at end of table.

commodities, Eastern Europe, 1971-78

Exports										Commodity and country
1971	:	1972	:	1973	:	1974	:	1975	:	
:	:	:	:	:	:	:	:	:	:	
<u>1,000 metric tons</u>										
95	95	35	2	1	11	22	1			: Oilseeds:
3	2	3	2	1	1	6	--			: Bulgaria
--	--	--	--	--	--	--	--			: Czechoslovakia
80	36	27	30	45	41	54	97			: GDR
61	10	57	3	76	175	78	5			: Hungary
25	78	42	29	--	--	--	--			: Poland
28	15	6	22	3	3	2	2			: Romania
292	236	170	88	126	231	162	105			: Yugoslavia
										: Total
										:
20	26	19	23	21	23	22	4			: Vegetable oil, edible:
8	1	1	1	1	1	3	--			: Bulgaria
--	--	--	--	--	--	--	--			: Czechoslovakia
44	41	41	39	38	39	50	57			: GDR
17	62	47	47	57	76	101	61			: Hungary
132	129	142	165	141	87	130	131			: Poland
6	1	3	7	--	--	--	--			: Romania
227	260	253	282	258	226	306	253			: Yugoslavia
										: Total
										:
36	40	42	--	--	68	10	--			: Oilseed meal:
14	29	27	27	35	11	22	46			: Bulgaria
--	--	--	--	--	--	--	--			: Czechoslovakia
98	60	117	171	163	366	267	--			: GDR
30	14	--	6	4	2	18	--			: Hungary
--	--	--	--	--	--	--	--			: Poland
8	9	--	--	--	6	2	--			: Romania
186	152	186	204	202	453	319	46			: Yugoslavia
										: Total
										:
9	10	6	2	1	2	3	--			: Cotton:
--	--	--	--	--	4	--	--			: Bulgaria
--	--	--	--	--	--	--	--			: Czechoslovakia
--	--	--	--	--	--	--	--			: GDR
--	--	--	--	--	--	--	--			: Hungary
--	--	--	--	--	--	--	--			: Poland
--	--	--	--	--	--	--	--			: Romania
--	--	--	--	--	--	--	--			: Yugoslavia
9	10	6	2	1	6	3	--			: Total
										:
137	2	--	--	--	7	12	7			: Hides, cattle 1/:
--	--	--	--	--	--	--	--			: Bulgaria
--	--	--	--	--	--	--	--			: Czechoslovakia
--	--	--	--	--	--	--	--			: GDR
--	--	--	--	--	--	--	--			: Hungary
140	130	75	85	140	--	80	10			: Poland 2/
--	--	--	--	--	--	--	--			: Romania
--	--	--	--	--	--	--	--			: Yugoslavia
277	132	75	85	140	7	92	17			: Total

--Continued

Table 6--Trade in selected agricultural

Commodity and country	Imports								:	
	1971	1972	1973	1974	1975	1976	1977	1978		
	:	:	:	:	:	:	:	1979		
<u>1,000 metric tons</u>										
Meat and meat products 3/:										
Bulgaria	15	10	15	39	19	17	11	8		
Czechoslovakia	76	46	22	41	32	22	31	23		
GDR	56	47	43	25	23	20	30	21		
Hungary	16	14	27	19	12	27	10	6		
Poland	153	65	55	6	16	46	104	33		
Romania	46	43	8	10	3	11	3	36		
Yugoslavia	5	11	46	20	8	10	28	39		
Total	367	236	216	160	113	153	217	166		
Sugar										
Bulgaria	305	158	232	212	295	239	214	226		
Czechoslovakia	197	143	148	165	48	108	64	85		
GDR	433	331	260	285	166	189	234	212		
Hungary	198	145	174	226	198	151	91	59		
Poland	44	37	29	50	43	16	30	60		
Romania	129	82	80	88	52	129	222	--		
Yugoslavia	155	295	463	119	119	342	84	--		
Total	1,461	1,191	1,386	1,145	921	1,174	939	642		
Tobacco:										
Bulgaria	6	12	5	7	9	4	5	8		
Czechoslovakia	17	21	18	16	14	15	16	27		
GDR	19	23	18	20	20	16	18	19		
Hungary	8	9	9	9	8	7	9	6		
Poland	3	3	7	4	10	11	7	8		
Romania	5	2	2	7	2	2	1	1		
Yugoslavia	5	6	2	2	6	2	4	3		
Total	63	76	61	65	69	57	60	72		

commodities, Eastern Europe, 1971-78

Exports										Commodity and country
1971	1972	1973	1974	1975	1976	1977	1978	1979		
:	:	:	:	:	:	:	:	:		
<u>1,000 metric tons</u>										
										: Meat and meat products <sup>3/</sup> :
67	74	65	61	99	88	68	62			: Bulgaria
30	25	50	9	16	10	--	18			: Czechoslovakia
60	71	68	39	69	110	76	69			: GDR
162	163	134	201	249	210	293	138			: Hungary
174	173	194	234	209	157	142	117			: Poland
55	69	111	133	165	165	194	158			: Romania
102	108	91	57	85	88	62	77			: Yugoslavia
650	683	713	734	892	828	835	639			: Total
										: Sugar
36	--	--	--	--	--	9	--			: Bulgaria
325	226	225	189	227	72	171	300			: Czechoslovakia
144	158	120	186	64	67	92	82			: GDR
2	2	2	13	7	1	2	12			: Hungary
98	352	425	180	73	35 <sup>4</sup>	272	285			: Poland
11	170	--	116	28	--	174	--			: Romania
--	--	--	7	2	--	1	--			: Yugoslavia
616	908	772	691	401	494	721	679			: Total
										: Tobacco:
62	63	69	69	71	70	70	62			: Bulgaria
--	3	1	2	2	1	--	--			: Czechoslovakia
2	2	2	2	2	2	2	2			: GDR
6	3	2	1	1	1	1	1			: Hungary
12	9	12	13	10	10	10	9			: Poland
1	3	6	6	9	10	10	10			: Romania
20	17	18	19	25	25	19	27			: Yugoslavia
103	100	110	112	118	119	112	111			: Total

-- = No information reported, negligible, or none.

<sup>1/</sup> Thousand pieces.

<sup>2/</sup> Converted from metric tons to pieces at 20 kilograms per piece.

<sup>3/</sup> Includes poultry meat.

Sources: Statistical yearbooks of respective countries, CEMA yearbook, FAO Trade book, Statistical yearbooks of trading partners .

Table 7--January livestock numbers, Eastern Europe, 1971-80 1/

Category and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
<u>1,000 head</u>								
Cattle, total:								
1971	1,279	4,288	5,190	1,912	10,220	5,216	5,138	33,243
1972	1,379	4,349	5,293	1,883	10,562	5,528	5,148	34,142
1973	1,441	4,466	5,379	1,893	11,265	5,767	5,366	35,577
1974	1,454	4,556	5,482	1,931	12,309	5,897	5,681	37,310
1975	1,554	4,566	5,585	2,018	12,815	5,983	5,872	38,393
1976	1,656	4,555	5,532	1,904	12,764	6,126	5,755	38,293
1977	1,722	4,654	5,471	1,887	12,002	6,351	5,641	37,728
1978	1,736	4,758	5,549	1,949	12,360	6,306	5,500	38,158
1979	1,762	4,887	5,572	1,966	12,409	6,511	5,491	38,598
1980	1,788	4,900	5,596	1,955	12,272	6,513	5,365	38,389
1981								
Cows:								
1971	589	1,881	2,163	763	5,829	2,276	2,774	16,275
1972	607	1,900	2,173	750	5,904	2,385	2,786	16,505
1973	620	1,906	2,169	762	6,023	2,447	2,921	16,848
1974	615	1,927	2,164	786	6,268	2,498	3,056	17,314
1975	644	1,927	2,157	797	6,350	2,537	3,195	17,607
1976	670	1,903	2,155	760	6,138	2,560	3,267	17,453
1977	691	1,898	2,146	766	5,786	2,568	3,227	17,082
1978	695	1,898	2,158	781	5,878	2,580	3,184	17,175
1979	717	1,909	2,140	788	5,929	2,670	3,134	17,287
1980	715	1,920	2,124	785	5,905	2,682	3,090	17,221
1981								
Hogs:								
1971	2,369	5,530	9,684	7,311	13,863	6,359	6,562	51,678
1972	2,806	5,935	9,995	7,594	16,946	7,742	6,216	57,234
1973	2,598	6,093	10,361	6,858	19,023	8,785	6,342	60,060
1974	2,431	6,266	10,849	8,011	21,451	8,987	7,401	65,396
1975	3,422	6,719	11,518	8,293	21,709	8,566	7,683	67,910
1976	3,889	6,683	11,501	6,953	21,647	8,813	6,536	66,022
1977	3,456	6,820	11,291	7,854	16,766	10,193	7,326	63,706
1978	3,400	7,510	11,757	7,850	20,591	9,744	8,452	69,304
1979	3,772	7,601	11,734	8,011	21,108	10,336	7,747	70,309
1980	3,832	7,600	12,132	8,330	20,897	10,889	7,700	71,380
1981								

--Continued

Table 7--January livestock numbers, Eastern Europe, 1971-80 1/

Category and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
<u>1,000 head</u>								
Sheep:								
1971	9,678	981	1,598	2,316	2,661	13,818	8,703	39,755
1972	10,127	932	1,607	2,054	2,653	14,071	8,326	39,770
1973	9,920	889	1,657	1,936	2,627	14,455	7,774	39,258
1974	9,765	842	1,742	1,878	2,595	14,302	7,852	38,976
1975	9,791	811	1,847	2,021	2,660	13,929	8,175	39,234
1976	10,014	805	1,882	2,039	3,178	13,865	7,831	39,614
1977	9,723	797	1,870	2,350	3,151	14,331	7,484	39,706
1978	10,145	841	1,927	2,619	3,593	14,463	7,514	41,102
1979	10,105	865	1,965	2,863	3,704	15,612	7,339	42,453
1980	10,358	880	1,979	3,000	3,800	16,195	7,294	43,506
1981								
Horses:								
1971	170	131	126	222	2,569	668	1,048	4,934
1972	159	118	106	211	2,469	654	1,015	4,732
1973	148	100	94	188	2,401	631	964	4,526
1974	142	84	82	172	2,387	594	945	4,406
1975	137	71	76	163	2,330	557	922	4,256
1976	133	62	70	156	2,100	562	864	3,947
1977	128	57	68	147	2,080	576	812	3,868
1978	125	53	65	144	1,976	550	759	3,672
1979	124	49	66	134	1,870	571	701	3,515
1980	122	48	64	130	1,825	550	690	3,429
1981								
Poultry:								
1971	33,706	39,187	43,034	61,300	87,561	54,333	44,954	364,075
1972	34,102	38,238	43,343	58,800	88,854	61,262	44,584	369,183
1973	34,788	39,170	43,658	50,600	92,875	64,496	49,206	374,793
1974	36,939	41,232	45,667	55,300	94,227	66,511	54,685	394,561
1975	35,089	39,476	47,530	57,500	96,583	67,672	54,991	398,841
1976	38,061	40,130	47,122	56,100	99,795	78,626	54,764	414,598
1977	39,504	44,142	48,444	63,500	79,200	91,503	59,031	425,324
1978	41,080	44,774	48,258	64,600	83,708	89,019	60,398	431,837
1979	40,297	46,957	50,240	66,300	83,696	99,725	61,513	448,728
1980	40,500	48,000	51,444	67,427	84,533	95,417	62,743	450,064
1981								

1/ 1980 data are preliminary.

Table 8--Production of principal livestock products,  
Eastern Europe, annual 1971-79 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
<u>1,000 metric tons</u>								
Beef and veal <u>2/</u> :								
1971	101	373	334	203	642	212	274	2,139
1972	110	377	349	187	586	219	277	2,105
1973	126	404	368	210	627	251	286	2,272
1974	116	431	389	187	808	250	328	2,509
1975	112	431	476	229	870	260	351	2,729
1976	127	415	477	200	920	282	356	2,777
1977	142	414	435	199	846	309	359	2,704
1978	142	421	451	208	846	290	360	2,718
1979	150	435	452	208	900	312	362	2,819
1980								
1981								
Mutton, lamb, and goat meat <u>2/</u> :								
1971	102	8	10	18	29	67	52	286
1972	101	8	11	15	30	63	50	278
1973	100	8	11	17	29	69	50	284
1974	100	7	13	16	28	70	49	283
1975	90	7	14	17	26	71	56	281
1976	101	6	16	14	25	69	61	292
1977	88	6	15	14	27	78	57	285
1978	98	5	15	15	27	74	62	296
1979	100	5	15	15	31	82	61	309
1980								
1981								
Pork <u>2/</u> :								
1971	204	624	854	753	1,357	474	670	4,936
1972	243	681	927	820	1,643	591	617	5,522
1973	223	671	970	733	1,833	674	559	5,663
1974	212	703	1,041	861	1,948	749	715	6,229
1975	329	738	1,198	892	1,852	724	722	6,455
1976	370	728	1,158	799	1,594	772	677	6,098
1977	321	780	1,160	931	1,599	778	770	6,339
1978	321	910	1,184	955	1,815	810	886	6,881
1979	340	911	1,188	980	1,846	871	753	6,889
1980								
1981								
Poultry meat <u>2/</u> :								
1971	111	111	99	237	150	145	149	1,002
1972	108	119	107	243	172	190	144	1,083
1973	113	124	111	252	196	209	160	1,165
1974	131	129	124	272	223	238	181	1,298
1975	123	134	125	280	254	273	188	1,377
1976	130	141	131	308	294	303	204	1,511
1977	149	152	134	320	341	338	227	1,661
1978	158	161	135	342	376	356	253	1,781
1979	168	164	135	355	419	411	273	1,925
1980								
1981								

--Continued

Table 8--Production of principal livestock products,  
Eastern Europe, annual 1971-79 1/

Commodity and year	:	:	Czecho- Bulgaria	:	:	:	:	:	Yugo- slavia	Total Eastern
1,000 metric tons										
Total meat 2/ 3/ :										
1971	:	522	1,157	1,326	1,216	2,232	898	1,102	8,453	
1972	:	565	1,225	1,423	1,270	2,480	1,063	1,052	9,078	
1973	:	566	1,242	1,490	1,217	2,729	1,203	1,067	9,514	
1974	:	562	1,307	1,598	1,341	3,061	1,307	1,283	10,459	
1975	:	657	1,349	1,837	1,422	3,062	1,328	1,329	10,984	
1976	:	732	1,322	1,808	1,324	2,896	1,426	1,309	10,817	
1977	:	703	1,383	1,767	1,467	2,883	1,503	1,425	11,131	
1978	:	726	1,529	1,809	1,525	3,132	1,533	1,570	11,824	
1979	:	765	1,547	1,814	1,563	3,254	1,676	1,452	12,071	
1980	:									
1981	:									
Milk 4/ :										
1971	:	1,291	4,924	7,150	1,802	15,146	2,830	2,580	35,723	
1972	:	1,308	5,123	7,515	1,810	15,765	3,164	2,813	37,498	
1973	:	1,344	5,430	7,738	1,957	16,243	3,390	3,105	39,207	
1974	:	1,410	5,503	8,075	2,020	16,667	3,387	3,487	40,549	
1975	:	1,436	5,462	8,095	1,822	16,375	3,458	3,654	40,302	
1976	:	1,458	5,400	8,092	1,931	16,520	3,826	3,846	41,073	
1977	:	1,548	5,530	7,939	2,142	16,929	4,212	4,072	42,372	
1978	:	1,600	5,642	8,225	2,266	17,122	4,368	4,132	43,355	
1979	:	1,698	5,665	8,100	2,370	17,019	4,377	4,173	43,402	
1980	:									
1981	:									
Millions										
Eggs:										
1971	:	1,747	3,996	4,504	3,475	7,080	3,984	2,937	27,723	
1972	:	1,703	4,120	4,425	3,217	7,475	4,300	2,964	28,204	
1973	:	1,736	4,254	4,554	3,285	7,437	4,655	3,201	29,122	
1974	:	1,753	4,468	4,922	3,628	7,871	4,871	3,674	31,187	
1975	:	1,851	4,499	5,047	4,001	8,013	5,412	3,590	32,407	
1976	:	1,848	4,492	5,217	3,995	8,020	6,153	3,825	33,550	
1977	:	2,026	4,639	5,266	4,528	8,494	6,299	4,041	35,293	
1978	:	2,221	4,690	5,219	4,748	8,531	6,819	4,062	36,290	
1979	:	2,302	4,732	5,141	4,530	8,702	7,290	4,103	36,800	
1980	:									
1981	:									

1/ 1979 data are preliminary.

2/ Data include edible slaughter fat and offal.

3/ Includes horse and rabbit meat, CEMA data except for Yugoslavia.

4/ Data include only cows milk for consumption in Romania and Yugoslavia for the entire series, and in Hungary since 1975. In the remaining countries data include milk sucked by calves. In the GDR, milk production is given in 3.5 percent fat equivalent. One liter is equal to 1.031 kilograms.

Table 9--Total and agricultural trade, Eastern Europe, 1974-79

	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total
<u>Million dollars</u>								
Export 1/:								
1974								
1974	3,836	7,053	8,748	5,129	8,315	4,873	3,805	41,760
1975	4,691	8,356	10,088	6,093	10,283	5,341	4,072	48,924
1976	5,382	9,035	11,361	4,932	11,017	6,138	4,878	52,743
1977	6,351	10,303	12,024	5,831	12,279	7,022	5,256	59,066
1978	7,300	11,738	13,267	6,345	13,470	7,409	5,671	65,200
1979 2/	8,425	12,943	14,912	7,436	15,104	8,757	6,493	74,070
Import 1/:								
1974								
1974	4,326	7,532	9,646	5,575	10,482	5,144	7,520	50,225
1975	5,408	9,081	11,290	7,178	12,536	5,342	7,697	58,532
1976	5,626	9,706	13,196	5,528	13,867	6,095	7,367	61,385
1977	6,393	11,187	14,334	6,522	14,616	7,015	9,634	69,701
1978	7,465	12,560	14,572	7,902	15,320	8,173	9,988	75,980
1979 2/	8,020	13,958	16,321	8,107	16,271	9,824	12,864	85,365
Balance:								
1974								
1974	-490	-479	-898	-446	-2,167	-270	-3,715	-8,465
1975	-717	-725	-1,202	-1,085	-2,253	-1	-3,625	-9,608
1976	-244	-671	-1,835	-596	-2,850	43	-2,489	-8,642
1977	-42	-884	-2,310	-691	-2,337	7	-4,378	-10,635
1978	-165	-822	-1,305	-1,557	-1,850	-764	-4,317	-10,780
1979 2/	405	-1,015	-1,409	-671	-1,167	-1,067	-6,371	-11,295
Agricultural export 3/ :								
1974								
1974	721	399	186	1,261	927	843	474	4,811
1975	841	383	248	1,397	922	862	482	5,135
1976	953	328	278	1,453	959	938	592	5,501
1977	1,028	409	258	1,749	1,015	1,103	590	6,152
1978	1,055	464	345	1,760	1,008	1,198	612	6,442
1979								
Agricultural import 3/ :								
1974								
1974	503	1,372	1,500	819	1,483	732	1,209	7,618
1975	526	1,304	1,556	809	1,585	694	769	7,243
1976	503	1,441	1,912	938	1,900	917	893	8,504
1977	439	1,462	1,869	1,156	2,088	847	1,135	8,996
1978	489	1,449	1,941	1,108	2,300	855	1,056	9,198
1979								
Agricultural trade balance:								
1974								
1974	218	-973	-1,314	442	-556	111	-735	-2,807
1975	315	-921	-1,308	588	-663	168	-287	-2,108
1976	450	-1,113	-1,634	515	-941	21	-301	-3,003
1977	589	-1,053	-1,611	593	-1,073	256	-545	-2,844
1978	566	-985	-1,596	652	-1,292	343	-444	-2,756
1979								

1/ United Nation's data.

2/ Preliminary.

3/ FAO data.

Table 10--Intra-CEMA trade, percent of total and value, Eastern Europe, 1974-78

Item	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total
<u>Percent</u>								
<b>Export:</b>								
1974	72.9	62.0	64.8	63.4	53.0	36.5	38.4	52.5
1975	77.4	66.5	69.3	68.5	56.9	38.8	46.2	56.8
1976	78.0	69.4	67.6	56.5	56.9	38.3	41.6	57.4
1977	77.6	68.7	70.6	56.5	57.3	41.7	39.9	62.3
1978	79.1	73.6	74.5	60.9	61.1	49.3	42.0	68.2
<b>Import:</b>								
1974	67.8	60.1	57.5	54.9	42.3	32.9	22.7	44.2
1975	70.7	65.6	63.5	64.0	43.8	37.1	24.2	48.8
1976	75.3	66.2	60.8	52.2	44.9	40.1	30.1	50.7
1977	78.4	66.4	65.6	50.5	49.8	42.0	28.6	58.9
1978	81.5	71.9	69.9	52.1	54.1	44.3	29.0	61.2
<u>Million rubles</u>								
<b>Export:</b>								
1974	2,087	3,193	4,227	2,281	3,294	1,327	1,821	18,230
1975	2,703	3,878	5,207	2,741	4,377	1,543	2,344	22,793
1976	3,119	4,526	5,719	3,311	4,690	1,754	2,501	25,620
1977	3,595	5,000	6,326	3,859	5,254	2,185	2,703	28,922
1978	4,044	5,863	7,365	4,419	6,145	2,723	3,145	33,704
<b>Import:</b>								
1974	2,189	3,302	4,138	2,110	3,311	1,260	2,127	18,437
1975	2,848	4,158	5,343	2,973	4,108	1,479	2,321	23,230
1976	3,151	4,631	5,980	3,361	4,655	1,820	2,764	26,362
1977	3,657	5,244	7,003	3,794	5,439	2,196	3,550	30,883
1978	4,262	6,119	7,591	7,639	6,205	2,651	3,820	35,287
<b>Balance:</b>								
1974	-102	-109	89	171	-17	67	-306	-207
1975	-145	-280	-136	-232	269	64	23	-437
1976	-32	-105	-261	-50	35	-66	-263	-742
1977	-62	-244	-677	65	-185	-11	-847	-1,961
1978	-218	-256	-266	-220	-60	72	-675	-1,582

SOURCE: CEMA yearbook.

Table 11--U.S. exports to Eastern Europe, total and agriculture's share, 1974-79

Country	1974	1975	1976	1977	1978	1979	1980	1981
<u>Million dollars</u>								
Bulgaria:								
Direct	22.3	29.8	43.3	23.9	48.2	56.5		
Transshipment	--	--	--	--	--	--		
Total	22.3	29.8	43.3	23.9	48.2	56.5		
Czechoslovakia:								
Direct	48.9	53.1	148.7	74.7	105.5	281.2		
Transshipment	39.6	49.5	106.4	62.8	20.0	24.3		
Total	88.5	102.6	255.1	137.5	125.5	305.5		
GDR:								
Direct	21.9	17.3	64.9	36.1	170.4	356.0		
Transshipment	196.8	333.2	354.7	208.7	27.9	48.3		
Total	218.7	350.5	419.6	244.8	198.3	404.3		
Hungary:								
Direct	56.4	76.2	63.1	80.6	98.5	77.9		
Transshipment	.6	--	--	14.8	--	3.1		
Total	57.0	76.2	63.1	95.4	98.5	81.0		
Poland:								
Direct	395.6	583.3	623.4	438.9	680.0	793.0		
Transshipment	14.7	15.8	10.2	4.1	17.0	21.9		
Total	410.3	599.1	633.6	443.0	697.0	814.9		
Romania:								
Direct	277.8	190.6	250.3	260.0	318.9	501.2		
Transshipment	2.6	7.7	--	--	13.8	28.8		
Total	280.4	198.3	250.3	260.0	332.7	530.0		
Yugoslavia:								
Direct	310.0	326.3	296.9	356.3	474.9	756.5		
Transshipment	--	--	2.2	--	--	39.6		
Total	310.0	326.3	299.1	356.3	474.9	796.1		
Eastern Europe:								
Direct	1,132.9	1,276.6	1,490.6	1,270.5	1,896.4	2,822.3		
Transshipment	254.3	406.2	473.5	290.4	78.7	166.0		
Total	1,387.2	1,682.8	1,964.1	1,560.9	1,975.1	2,988.3		
<u>Percent</u>								
Agriculture's share:								
in total trade								
Bulgaria	70.9	65.0	73.0	11.2	82.4	72.6		
Czechoslovakia	79.4	80.6	90.2	82.8	77.5	89.1		
GDR	98.4	98.1	98.4	98.1	91.7	91.5		
Hungary	65.2	51.7	35.5	51.4	52.9	34.0		
Poland	65.6	63.0	77.6	67.5	73.5	85.6		
Romania	56.7	54.8	68.6	45.5	48.8	68.9		
Yugoslavia	37.3	12.5	13.3	19.9	23.4	40.7		
Eastern Europe	63.6	61.0	71.3	57.3	58.5	70.2		

-- = None or negligible.

Sources: U.S. Foreign Agricultural Trade Statistical Report USDA/ESCS. U.S. Export Sales, USDA/FAS.



Table 12--Volume and value of U.S. agricultural exports

Commodity and country	1974	1975	1976	1977	1978	1979 2/	1980
1,000 metric tons							
Wheat:							
Bulgaria	--	--	--	--	--	--	--
Czechoslovakia	--	9	143	--	--	442	
GDR	11	335	719	84	219	196	
Hungary	--	--	--	--	--	--	
Poland	199	502	698	637	584	817	
Romania	--	86	427	171	--	81	
Yugoslavia	146	--	--	--	--	406	
Total	356	932	1,987	892	803	1,942	
Feed grains:							
Bulgaria	64	115	246	3	226	42	
Czechoslovakia	5	--	769	81	398	810	
GDR	1,164	1,626	2,158	1,248	925	1,702	
Hungary	--	--	--	112	106	1	
Poland	697	1,471	2,101	1,496	2,063	2,449	
Romania	512	534	239	242	327	898	
Yugoslavia	52	--	--	--	269	1,092	
Total	2,494	3,746	5,513	3,182	4,314	6,994	
Total grains:							
Bulgaria	64	115	246	3	226	42	
Czechoslovakia	5	10	912	81	398	1,252	
GDR	1,175	1,961	2,877	1,332	1,145	1,898	
Hungary	--	--	--	112	107	1	
Poland	896	1,973	2,799	2,133	2,683	3,266	
Romania	512	620	666	413	327	979	
Yugoslavia	198	--	--	--	269	1,498	
Total	2,850	4,679	7,500	4,074	5,155	8,936	
Soybeans:							
Bulgaria	--	--	--	1	--	--	
Czechoslovakia	13	5	1	3	20	2	
GDR	58	--	--	12	6	3	
Hungary	--	--	--	--	--	--	
Poland	126	120	56	--	151	200	
Romania	--	16	220	137	244	260	
Yugoslavia	--	--	1	96	186	275	
Total	197	141	278	249	607	740	
Vegetable oil:							
Bulgaria	--	--	--	--	--	--	
Czechoslovakia	--	--	--	--	--	--	
GDR	--	--	6	1	--	--	
Hungary	--	--	--	--	--	--	
Poland	9	12	10	--	18	37	
Romania	--	--	--	--	--	--	
Yugoslavia	40	49	--	--	--	--	
Total	49	61	16	1	18	37	

Footnotes and sources at end of table.

to Eastern Europe, including transshipments, 1974-79 1/

1974	1975	1976	1977	1978	1979 <u>2/</u>	1980	Commodity and country
<u>1,000 U.S. dollars</u>							
;							
: Wheat:							
--	--	--	--	--	--	--	: Bulgaria
2,244	1,576	21,400	30	--	78,681		: Czechoslovakia
	58,074	106,275	9,539	28,129	35,153		: GDR
	--	--	--	--	--		: Hungary
18,589	80,296	101,640	59,172	68,041	120,286		: Poland
	11,793	48,453	15,969	--	12,493		: Romania
24,395	--	--	--	--	68,848		: Yugoslavia
45,228	151,739	277,768	84,710	96,170	315,461		: Total
;							
: Feed grains:							
9,995	14,780	28,456	173	24,846	5,485		: Bulgaria
672	39	91,450	8,875	44,598	98,418		: Czechoslovakia
149,918	229,950	253,253	125,042	94,122	222,050		: GDR
	--	--	12,937	11,865	666		: Hungary
86,651	185,606	252,237	142,414	209,515	281,948		: Poland
70,351	69,585	25,576	20,864	32,412	104,200		: Romania
7,510	--	--	--	27,930	127,548		: Yugoslavia
325,097	499,960	650,972	310,305	445,288	840,315		: Total
;							
: Total grains:							
9,995	14,780	28,456	173	24,846	5,485		: Bulgaria
672	1,615	112,850	8,905	44,598	177,099		: Czechoslovakia
152,162	288,024	359,528	134,581	122,251	257,203		: GDR
	--	--	12,937	11,865	666		: Hungary
105,240	265,902	353,877	201,586	278,860	402,234		: Poland
70,351	81,378	74,029	36,833	32,412	116,693		: Romania
31,905	--	--	--	27,930	196,396		: Yugoslavia
370,325	651,699	928,740	395,015	542,762	1,155,776		: Total
;							
: Soybeans:							
--	--	--	285	--	--		: Bulgaria
2,550	1,230	9,410	6,920	5,000	431		: Czechoslovakia
11,282	--	--	3,090	1,460	1,083		: GDR
	--	--	--	--	--		: Hungary
36,151	31,666	10,796	--	39,827	54,643		: Poland
	3,506	45,282	38,646	54,629	74,050		: Romania
	314	210	23,476	48,478	78,477		: Yugoslavia
49,983	36,716	65,698	72,417	149,394	208,684		: Total
;							
: Vegetable oil:							
--	--	--	--	--	--		: Bulgaria
--	--	--	--	--	--		: Czechoslovakia
--	--	4,149	720	--	--		: GDR
--	--	--	--	--	--		: Hungary
7,373	11,126	4,726	--	8,101	23,903		: Poland
	--	--	--	--	--		: Romania
24,963	34,570	--	--	--	--		: Yugoslavia
32,336	45,696	8,875	720	8,101	23,903		: Total
;							

Table 12--Volume and value of U.S. agricultural exports

Commodity and country	1974	1975	1976	1977	1978	1979 <u>2/</u>	1980
<u>1,000 metric tons</u>							
Soybean meal and cake							
Bulgaria	16	24	11	--	57	103	
Czechoslovakia	165	305	475	341	130	243	
GDR	216	298	230	414	261	458	
Hungary	121	196	71	94	147	67	
Poland	271	228	392	178	518	366	
Romania	103	13	98	47	38	271	
Yugoslavia	222	13	182	109	112	81	
Total	1,114	1,077	1,459	1,183	1,263	1,589	
Cotton, excluding linters							
Bulgaria	--	--	--	--	--	--	
Czechoslovakia	--	--	--	--	--	--	
GDR	--	--	--	--	--	--	
Hungary	--	--	--	--	--	--	1
Poland	7	4	7	2	11	15	
Romania	19	10	--	4	9	16	
Yugoslavia	--	--	--	--	--	--	1
Total	26	14	7	6	20	33	
Cattle hides <u>3/</u> :							
Bulgaria	42	26	49	31	52	45	
Czechoslovakia	635	877	678	680	586	668	
GDR	2	15	9	43	39	33	
Hungary	286	158	270	227	180	144	
Poland	638	788	389	433	349	513	
Romania	1,777	1,226	1,651	1,472	1,942	1,317	
Yugoslavia	220	110	252	472	431	725	
Total	3,600	3,200	3,298	3,358	3,579	3,445	

to Eastern Europe, including transshipments, 1974-79 1/

1974	1975	1976	1977	1978	1979 <u>2/</u>	1980	Commodity and country
1,000 U.S. dollars							
3,181	3,544	1,590	--	11,637	23,381		: Soybean meal and cake:
33,290	50,824	81,131	72,946	25,797	57,115		: Bulgaria
45,966	51,964	41,795	96,358	54,831	109,898		: Czechoslovakia
26,226	34,090	14,521	23,505	32,362	16,364		: GDR
62,993	37,998	73,853	41,262	108,549	81,638		: Hungary
25,455	1,886	17,702	9,403	8,467	65,479		: Poland
48,155	2,327	29,057	22,834	22,586	19,019		: Romania
245,266	183,452	259,649	266,308	264,229	372,894		: Yugoslavia
							: Total
--	--	--	--	--	--		: Cotton, excluding
--	--	--	--	--	--		: linters:
--	--	--	--	--	--		: Bulgaria
--	--	--	--	--	--		: Czechoslovakia
--	--	--	--	25	1,737		: GDR
9,262	4,131	9,842	3,949	14,726	22,252		: Hungary
38,818	12,206	--	6,548	13,529	23,991		: Poland
--	--	--	--	--	1,775		: Romania
48,080	16,337	9,842	10,497	28,280	49,755		: Yugoslavia
							: Total
							:
622	275	746	583	1,129	1,881		: Cattle hides:
9,678	8,034	11,116	13,049	13,999	28,509		: Bulgaria
45	195	159	655	754	1,110		: Czechoslovakia
4,213	1,432	3,486	4,349	4,066	5,375		: GDR
9,739	7,425	6,292	9,106	8,320	19,574		: Hungary
24,081	9,693	26,517	26,658	52,223	59,672		: Poland
4,212	1,548	5,080	10,925	3,586	14,639		: Romania
52,590	28,602	53,396	65,325	84,077	130,760		: Yugoslavia
							: Total
							:
2,008	1,011	766	1,640	2,120	10,272		: Other:
24,059	23,032	15,602	12,040	7,761	9,144		: Bulgaria
5,753	3,545	7,314	4,681	2,557	248		: Czechoslovakia
6,746	4,122	4,435	8,252	3,780	3,383		: GDR
38,402	26,318	32,062	43,236	53,584	92,960		: Hungary
286	35	8,054	216	1,120	25,424		: Poland
6,493	4,665	5,361	13,704	8,268	13,733		: Romania
83,747	62,728	73,594	83,769	79,190	155,164		: Yugoslavia
							: Total
							:
15,806	19,610	31,558	2,681	39,732	41,019		: Total agricultural
70,249	84,735	230,109	113,860	97,155	272,338		: exports:
215,208	343,728	412,945	240,085	181,853	370,015		: Bulgaria
37,185	40,463	22,442	49,043	52,098	27,525		: Czechoslovakia
269,160	384,566	491,448	299,139	511,967	697,204		: GDR
158,991	108,704	171,584	118,304	162,380	365,309		: Hungary
115,728	43,424	39,708	70,939	110,948	324,039		: Poland
882,327	1,025,230	1,399,794	894,051	1,156,133	2,097,449		: Romania
							: Yugoslavia
							: Total
							:

1/ Including transshipments through Belgium, Canada, Netherlands, and West Germany.

2/ Preliminary

3/ Thousand pieces.

SOURCES: United States Census Bureau; U.S. Foreign Agricultural Trade Statistical Report, USDA/ESCS/ IED; Export Sales Report, USDA/OGSM.

Table 13--Volume and value of U.S. agricultural imports from Eastern Europe, 1974-79

Commodities and country	1974	1975	1976	1977	1978	1979	1980	1981
<u>1,000 metric tons</u>								
Processed meat:								
Bulgaria	0.1	0.2	--	0.6	0.7	1.2	1.5	--
Czechoslovakia	0.4	0.2	0.6	0.7	1.2	1.5	43.3	--
GDR	--	--	--	--	--	--	--	--
Hungary	3.6	4.6	6.7	7.0	8.2	8.2	8.2	--
Poland	29.4	38.3	38.1	34.1	39.0	43.3	43.3	--
Romania	4.9	3.6	5.5	6.0	7.4	8.8	8.8	--
Yugoslavia	9.0	12.1	13.8	15.7	19.8	14.8	14.8	--
Total	47.4	59.0	64.8	63.4	75.6	76.6	76.6	--
1,000 U.S. dollars								
Processed meat:								
Bulgaria	284	383	--	--	--	--	--	--
Czechoslovakia	736	443	1,960	2,112	3,787	4,419	4,419	--
GDR	--	40	106	100	202	61	61	--
Hungary	7,418	12,475	19,798	20,013	27,248	25,837	25,837	--
Poland	69,918	105,965	126,993	107,704	136,042	146,913	146,913	--
Romania	9,930	8,349	12,998	14,756	21,932	25,385	25,385	--
Yugoslavia	20,758	35,652	44,342	47,738	65,863	49,270	49,270	--
Total	109,044	163,307	206,197	192,423	255,074	251,885	251,885	--
Other products:								
Bulgaria	3,361	3,693	10,688	23,414	24,789	23,239	23,239	--
Czechoslovakia	1,645	1,434	2,004	3,318	2,357	3,307	3,307	--
GDR	1,003	532	797	1,587	2,648	2,187	2,187	--
Hungary	2,262	1,198	2,769	3,470	5,028	9,927	9,927	--
Poland	17,879	12,550	17,225	17,673	18,528	17,056	17,056	--
Romania	1,820	3,800	3,080	5,784	9,665	8,203	8,203	--
Yugoslavia	24,813	26,788	32,703	37,951	47,547	37,172	37,172	--
Total	52,783	49,995	69,266	93,197	110,562	101,091	101,091	--
Total:								
Bulgaria	3,645	4,076	10,688	23,414	24,789	23,239	23,239	--
Czechoslovakia	2,381	1,877	3,964	5,430	6,144	7,726	7,726	--
GDR	1,003	572	903	1,687	2,850	2,248	2,248	--
Hungary	9,680	13,673	22,567	23,483	32,276	35,764	35,764	--
Poland	87,797	118,515	144,218	125,377	154,570	163,969	163,969	--
Romania	11,750	12,149	16,078	20,540	31,597	33,588	33,588	--
Yugoslavia	45,571	62,440	77,045	85,689	113,410	86,442	86,442	--
Total	161,827	213,302	275,463	285,620	365,636	352,976	352,976	--

Source: U.S. Bureau of Census.

Table 14--Per capita consumption of selected foods, Eastern Europe, 1971-79

Item	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania 1/	Yugo- slavia
<u>Kilograms</u>							
Total meat:							
1971	43.6	73.7	68.5	59.5	56.1	--	37.6
1972	49.0	75.8	70.8	61.5	59.3	--	37.8
1973	50.0	76.7	73.5	63.7	62.1	--	38.5
1974	51.6	78.4	75.3	66.2	65.6	--	43.7
1975	58.0	81.1	77.8	68.5	70.3	45.7	48.3
1976	62.0	81.0	80.9	67.5	70.0	--	48.4
1977	59.3	81.4	83.5	68.9	69.1	51.9	49.4
1978	61.1	(83.4)	86.2	71.2	70.6	--	(52.0)
1979	(62.0)	(84.0)	(87.0)	(71.2)	(72.0)	--	(50.0)
1980							
Eggs 2/:							
1971	127	284	246	258	193	--	145
1972	126	273	240	260	196	--	149
1973	135	293	250	264	200	--	154
1974	140	293	264	270	205	--	162
1975	146	297	269	274	209	214	166
1976	149	294	274	270	214	--	164
1977	171	308	274	308	214	238	180
1978	197	315	284	320	219	--	--
1979	202	--	--	--	221	--	--
1980							
Vegetable oil:							
1971	13.0	6.0	2.2	1.9	5.8	--	10.6
1972	12.9	6.1	2.3	2.2	5.8	--	9.7
1973	13.0	6.1	2.0	2.5	6.2	--	10.1
1974	13.7	6.1	2.0	2.8	6.5	--	10.8
1975	14.1	6.7	2.0	2.9	6.5	--	10.6
1976	14.1	6.8	2.5	3.3	6.8	--	10.5
1977	14.5	6.8	1.9	3.6	7.1	--	10.8
1978	14.6	6.9	1.9	3.8	7.0	--	--
1979	--	--	--	--	--	--	--
1980							
Sugar:							
1971	33.0	37.5	34.4	34.5	39.6	--	28.5
1972	31.6	37.7	35.5	35.5	40.9	--	29.1
1973	33.0	38.6	35.1	37.1	42.0	--	29.4
1974	33.2	38.6	36.9	37.7	43.9	--	33.1
1975	32.5	38.0	36.8	39.5	43.2	20.3	32.8
1976	34.5	38.2	38.6	33.0	43.9	--	32.8
1977	34.0	34.9	37.8	34.9	41.5	25.2	32.8
1978	35.0	37.5	38.9	(34.0)	42.7	--	--
1979	--	--	--	--	--	--	--
1980							

--Continued

Table 14--Per capita consumption of selected foods, Eastern Europe, 1971-79

Item	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania 1/	Yugo- slavia
<u>Kilograms</u>							
Grains (in flour equi- valent):							
1971	179	113	97	124	128	--	185
1972	173	111	96	122	127	--	186
1973	170	109	94	120	125	--	181
1974	165	108	94	120	123	--	188
1975	162	108	95	118	120	--	183
1976	164	108	95	116	122	--	180
1977	157	106	94	115	121	--	178
1978	158	107	94	115	120	--	--
1979							
1980							
Vegetables:							
1971	118	70	84	83	86	--	75
1972	116	74	93	83	84	--	76
1973	116	71	94	87	93	--	86
1974	125	76	88	87	84	--	82
1975	127	74	90	85	94	113	79
1976	114	71	86	84	87	--	88
1977	123	75	94	86	87	124	96
1978	127	72	98	83	92	--	--
1979							
1980							
Potatoes:							
1971	29	109	151	72	189	--	69
1972	29	106	146	69	187	--	63
1973	27	106	145	67	183	--	71
1974	27	108	141	66	177	--	71
1975	23	96	142	67	173	--	66
1976	25	100	144	64	173	--	68
1977	25	92	139	60	168	--	67
1978	30	88	139	63	166	--	--
1979							
1980							

-- = No information reported, negligible, or none.

( ) = Estimate.

1/ Révista Economica December 29, 1978.

2/ Numbers.

Table 15--Summary of descriptive data, Eastern Europe, 1978

Country	Land			Socialized			Population		Labor force		GNP 1/
	Total	Agricultural	Arable	agricul-	mid-	tural	Total	Agricultural	Total	Total	
	1,000 hectares			Percent			Millions		Millions		Billion
Bulgaria	11,091	6,215	4,292	99	8.8	4.72	1.27	24.8	2,818		
Czechoslovakia	12,788	6,952	5,246	94	15.1	7.57	1.12	70.7	4,682		
GDR	10,833	6,282	5,040	94	16.8	8.86	0.86	81.0	4,821		
Hungary	9,303	6,698	5,389	93	10.7	5.23	1.02	32.1	3,000		
Poland	31,268	19,059	14,988	23	35.0	19.09	5.94	108.3	3,094		
Romania	23,750	14,965	10,540	91	21.9	12.02	4.64	67.5	3,082		
Yugoslavia	25,580	14,281	7,927	30	22.0	8.52	2.75	55.3	2,514		
Total	124,613	74,452	53,422	--	130.3	66.01	17.60	439.7	3,375		

1/ Handbook of Economic Statistics, 1979, CIA, (in 1978 \$).

2/ Includes self-employed farmers.

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